



**FACTS ABOUT GROWING UP HEALTHY IN FRANKLIN COUNTY:** 2008 Collaborative Children's Health Report



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Helping kids of all ages just be  
kids instead of statistics.



# Our Children's Future

## Sparking a Community Conversation and Response

The well-being of its children is the most important measure of a community's quality of life. Are children safe? Do they have nutritious food to eat? Are they getting a good education? Will their childhood circumstances contribute to, or detract from, realizing the dreams we have for them?

As people concerned with the continued vibrancy of our community, we need to actively address those factors that limit the capacity of all of our children to reach their full potential.

When we evaluate a community's economic health, we look at key indicators, such as the number of people employed and the condition of schools. Similarly, certain public health issues and conditions are indicators of children's well-being. Ten public health indicators that significantly impact children and their prevalence in Franklin County, Ohio, are the subject of this report.

How our children fare on some of these indicators is sobering. Infant mortality is a case in point. More than 17,000 babies are born in Franklin County each year, and nearly 150 do not live to see their first birthday. Other indicators, such as immunization rates, show we are doing well in many neighborhoods but failing to reach those most in need. And the frightening upward trend in obesity will threaten quality and length of life as this generation of children ages.

Obesity is our number one health threat. The best way to overcome it is to prevent childhood obesity, but this will be difficult. The causes of pediatric obesity are many and preventing it will require changing deep-seated attitudes and behaviors. It will take sustained work in all segments of the community to make a long-term impact, and we join the many community organizations that share our concern.

Many of the health threats facing our children are complex and often more rooted in the social fabric than in medicine. Reducing those threats is a challenge. In the end, it's about removing obstacles that stand in the way of our children reaching their full potential.

Today, we add both our voice and our actions to a vital conversation about the well-being of Franklin County children. After you read this report, I encourage you to choose an indicator that strikes a chord and urge you to get engaged to make an impact. Your involvement will make a difference, for the children and for the future of Franklin County.



Steve Allen, MD

A handwritten signature in dark ink, appearing to read "Steve Allen".

Chief Executive Officer  
Nationwide Children's Hospital  
Columbus, Ohio



# Working Together as a Community

I want to personally thank the many partners for working together to produce this comprehensive report, and I want to give special thanks to Nationwide Children's Hospital for initiating this effort and the Columbus Public Health Department for providing much of the data.

As we continue to build strong neighborhoods in central Ohio, we must make the health and safety of our residents, especially children, a priority. Today's report indicators will help us as a community better understand the significant health challenges children in central Ohio face and how we as a community can work together to address these factors.

Central Ohio has among the nation's highest levels of obesity, diabetes and heart problems, and early childhood prevention has been a critical component to helping our children fight these diseases. In Columbus, we've worked with our partners at Columbus Public Health to tackle many of these challenges head on. Last year, Columbus Public Health implemented a program to help children learn healthy eating and exercise habits training 450 teachers and reaching 2,500 children. In addition, we provided approximately 34,000 pregnant, postpartum women, infants and children under 5 with vouchers for foods with essential nutrients needed during critical periods of growth and development. Our community's immunization efforts have been recognized as one of the most successful in the country by the Center for Disease Control earning the highest urban county immunization rate (80.1 percent) in the nation. This is proof that when our community tackles issues head on – we all win.

Although we've had many successes, there is still much more we can do. As Mayor, I am committed to fighting these serious health challenges, and I believe it starts by promoting healthy living. In my recent State of the City address I announced the creation of the Foundation for Healthy Lifestyles, a group that will raise funds to promote healthy living. Our first event will be a bicycle tour called the Tour De Columbus which will raise money to help create a series of Farmers Markets in Columbus neighborhoods. Having access to fresh fruits and vegetables is a significant step toward fighting many of the root causes of chronic conditions such as diabetes and heart disease.

As we consider today's results, I challenge the readers of this report to step up and take action. Working together as a community we can build healthier and safer homes for all children in central Ohio.



Michael B. Coleman

A handwritten signature in black ink, appearing to read "M.B. Coleman".

Mayor  
Columbus, Ohio

## Report Partners:

Africentric Personal Development Shop, Inc.  
American Cancer Society  
American Lung Association of Ohio, Central Region  
Central Ohio Trauma System  
Columbus Medical Association and Foundation  
Columbus Public Health Department  
Education Council

Mount Carmel Health Systems  
Nationwide Children's Hospital  
Nationwide Insurance  
Netcare Corporation  
Ohio Action for Healthy Kids  
Ohio Business Roundtable  
Ohio Commission on Minority Health

Ohio Department of Health  
OhioHealth  
Osteopathic Heritage Foundation  
Planned Parenthood of Central Ohio, Inc.  
Project L.O.V.E.  
The Ohio State University Medical Center  
United Way of Central Ohio



# Executive Summary

## Leading Health Indicators

In 2000, the U.S. Department of Health and Human Services introduced Healthy People 2010. The goals of this initiative are to increase the quality and years of healthy life and eliminate health disparities. To achieve these goals, Healthy People 2010 focuses on 10 leading indicators corresponding to the most significant, preventable health threats in the general population:

- Immunization
- Injury and Violence
- Mental Health
- Responsible Sexual Behavior
- Environmental Quality
- Substance Abuse
- Tobacco Use
- Access to Health Care
- Overweight and Obesity
- Physical Activity

The indicators selected for inclusion in this report on the health status of Franklin County children closely mirror these indicators while emphasizing the preventable health threats that impact children most. There are a number of vital issues affecting our community's children that are worthy of focus. These 10, however, have been called out for this report as the most prevalent and pressing:

- Infant Mortality
- Immunization
- Asthma
- Teen Smoking
- Teen Pregnancy
- Unintentional Injuries
- Adolescent Suicide
- Adolescent Homicide
- Access to Health Care
- Obesity

## The Data

The Columbus Public Health Department analyzed data comparing Franklin County, Ohio, and the United States for all indicators, as well as data by race and ethnicity for Franklin County. Additional data is included for each indicator where credible and informative data was available.

# Summary of Findings

## **INFANT MORTALITY**

The rate of deaths for infants under one year of age per 1,000 live births are comparable in Ohio (8.3) and Franklin County (8.4). Those rates are significantly higher, however, than in the United States overall (6.9). In Franklin County, the death rate for non-Hispanic black babies (15.7) is more than double the rate for non-Hispanic white babies (6.7) and nearly four times the rate for Hispanic babies (3.9).

## **IMMUNIZATION**

The national goal for immunizations is 90 percent. Franklin County has one of the highest immunization rates in an urban area in the United States. Nearly 86 percent of children are fully immunized at 19 to 35 months for diphtheria, tetanus, pertussis, polio, measles, influenza and hepatitis B. While the overall rate in Franklin County is very high, some neighborhoods have immunization rates as low as 50 percent.

## **ASTHMA**

One out of every 10 children (10.1 percent) in both Franklin County and Ohio have asthma. This is higher than the percent in the United States (8.9). Columbus has been ranked 34 on a list of 100 “asthma capitals” compiled by the Asthma and Allergy Foundation of America. Nationally, poor children suffer the most from asthma.

## **TEEN SMOKING**

In Franklin County, 13.8 percent of high school students smoke cigarettes monthly or more often. This is down from 23.8 percent in 1988. Because of differences in survey methods, the data for Franklin County cannot be compared to data for Ohio and the United States.

## **TEEN PREGNANCY**

Teen pregnancies declined 34 percent nationally between 1991 and 2005. Still, too many young women become pregnant before graduating high school, dramatically diminishing their chances to achieve their full potential. The number of births per 1,000 teens ages 18 to 19 is significantly higher in Franklin County (77.6) than in Ohio (68.4) and the United States (69.9). In Franklin County, the birth rate among Hispanic teens ages 15 to 19 is more than five times the rate among non-Hispanic whites and more than double the rate among non-Hispanic blacks.

## **UNINTENTIONAL INJURIES**

Nationally, more children die from unintentional injuries than all other causes combined. In Franklin County, the death rate because of unintentional injuries for children ages 0 to 19 is half that of both Ohio and the United States. Because most unintentional injury deaths in this age range are the result of motor vehicle crashes, reasons for Franklin County’s low rate include the higher number of fatalities that occur on rural roads and faster emergency response in urban areas.

### **ADOLESCENT SUICIDE**

Suicide is the third leading cause of death among young people ages 10 to 24. According to a 2005 survey conducted by the Centers for Disease Control and Prevention, 17 percent of U.S. high school students had seriously considered attempting suicide in the past year. Deaths per 100,000 population in the 15 to 24 age group are lower in Franklin County (7.5) than in Ohio (11.6) and the United States (10.3).

### **ADOLESCENT HOMICIDE**

Thirty-two adolescents were murdered in Franklin County in 2004. This number equates to 20.1 deaths per 100,000 population in the 15 to 24 age range, which is double the rate for Ohio (9.8). The rate for the United States is 12.2. Franklin County also had more homicides (13) for children and teens ages 0 to 19 than did Cuyahoga (9), Hamilton (5) and Montgomery (5) counties.

### **ACCESS TO HEALTH CARE**

The estimated percent of children who go without health insurance coverage in Franklin County is 7.3, which is higher than Ohio (5.4) but lower than the United States (9). Franklin County has the highest uninsured rate compared to Cuyahoga (4.0), Hamilton (5.6) and Montgomery (5.8) counties. Nationally, 38.9 percent of uninsured children are Hispanic, 35.8 percent are non-Hispanic white, and 17.7 percent are non-Hispanic black.

### **OBESITY**

The number of overweight children tripled nationally during the past three decades. Ohio currently has the 22nd highest rate of overweight children in the nation. A Franklin County health survey conducted in 2002 found that 25 percent of Franklin County children, 48 percent of Franklin County non-Hispanic black children, and 41 percent of Columbus children in poor families are overweight. The State of Ohio estimates that 37.6 percent of Franklin County third graders are overweight or at risk of becoming overweight.

Admissions, outpatient visits and emergency room visits, to Nationwide Children's Hospital for obesity-related diagnosis codes more than tripled from 2002 through 2007, further emphasizing the troubling problem of pediatric obesity in our community. Nationally, the additional hospital days needed annually by obese pediatric patients by the year 2020 is estimated to range between 1 and 6 million. It will cost \$8.6 to \$10.3 billion just for the added beds it will take to accommodate them.

A survey of 500 Franklin County households commissioned by Nationwide Children's Hospital found that only 5 percent of parents think healthy weight is a primary concern to discuss with their child's doctor, and 51 percent do not know that children who are heavier than normal for their height at age 8 or 9 are more likely to have depression as adults. The consensus of a special Pediatric Obesity Roundtable discussion—comprised of participants representing child, adult and public health as well as employer perspectives—is that it will take active involvement by the entire community to address the problem of obesity in Franklin County.



The children of Franklin County face a number of health risks. Understanding the facts is the first step in helping them reach their full potential.

Nearly **2x**  
the number of black babies  
die before age 1  
vs. the number of white babies



Each year **145**  
babies in Franklin County  
die before their  
first birthday



Preterm  
births rose **21%**  
nationally between  
1990 and 2006



# Family Cares for Premature Infant at Home

Kim and Charlie Ellis know the sadness and challenges of premature birth. Their first child died after being born too soon. So when daughter Paris was born early and weighed less than two pounds, they were afraid they would lose her, too.

Paris was hospitalized during the first six months of her life. It was frightening to know that a ventilator was keeping their newborn alive. Kim says any time there seemed to be hope, something would go wrong. "One time she would be breathing on her own and then she wouldn't."

Once Paris left the hospital, her well-being was in her family's hands. Both parents needed to learn how to take care of a "preemie" without having doctors, nurses and therapists standing right next to them. While it was tough, Kim adapted to the 24-hour care and monitoring that Paris required, which included being on a feeding tube and oxygen.

Today Paris is eating and breathing on her OWN. Her parents have turned their attention to their daughter's developmental progress because the risks of having disabilities and behavioral problems are greater for children who are born prematurely.



"You don't understand what it's like until you have a premature baby."

# The Facts

In Franklin County, 145 babies die each year before reaching their first birthday.

- Nationally, the rate of non-Hispanic black babies who die before age 1 is almost double the rate for non-Hispanic white babies.
- For the last 20 years in Franklin County, the infant death rate for non-Hispanic black babies has been more than double that for non-Hispanic white babies.

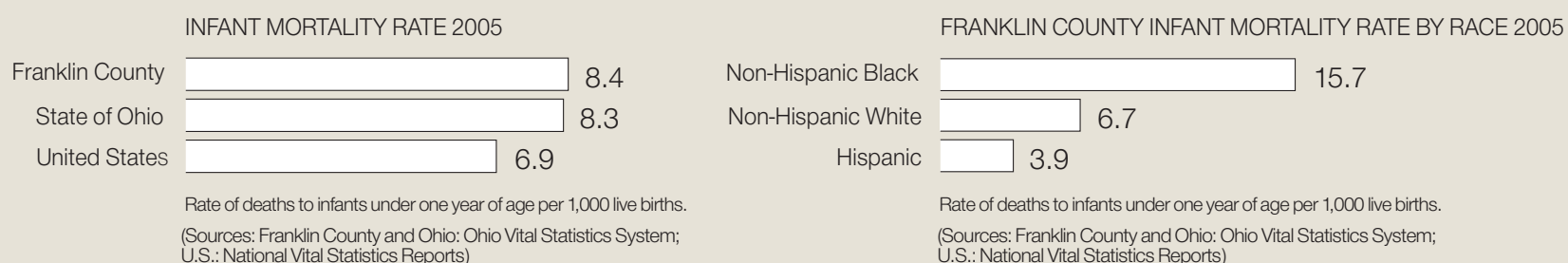
Infant mortality is a sentinel indicator of quality of life and one on which the United States underperforms. The U.S. has the second highest infant mortality rate in the developed world. Only Latvia's is higher. To address the problem of infant mortality we must understand its causes, which include medical conditions, safe sleep issues, sudden infant death syndrome and prematurity.

- The majority of infant deaths occur due to prematurity—birth at less than 37 weeks gestation.
- Prematurity accounted for 92 (or 62.2 percent) of 148 infant deaths in Franklin County in 2005.<sup>1</sup>
- Deaths due to prematurity for non-Hispanic black infants in 2005 were high relative to their proportion within the general population: only 28 percent of live births were non-Hispanic black babies, but non-Hispanic black babies accounted for 56 percent of all deaths due to prematurity.<sup>1</sup>

Nationally, preterm births rose 21 percent between 1990 and 2006, with more than a half million babies born preterm in 2006.<sup>2</sup> While reasons for the dramatic upswing aren't well understood, experts point to a number of factors that increase the risk of preterm delivery. History of preterm birth, current multifetal pregnancy, and some uterine and/or cervical abnormalities are identified most consistently.<sup>3</sup> Infection, diabetes mellitus, hypertension, late or no prenatal care, smoking, alcohol and illicit drug use are additional risk factors.

In the U.S., preterm births generated more than \$26.2 billion in medical and educational costs and lost productivity in 2005.<sup>4</sup>

## Infant Mortality Rates



# Expert Insights: How can the number of preterm births be reduced?

**COMMUNITY EXPERTS:** Teresa Long, MD, and Carolyn Slack

The best way to address our preterm birth rate is to improve the health of women before they conceive.

Healthy women tend to have healthy pregnancies and babies. Once she becomes pregnant, access to prenatal care becomes critical. Unfortunately we do not have enough prenatal care in this community. Since 2002, our community has lost up to 30 percent of our capacity for initial prenatal care appointments.

Appointments in public health settings are fewer for a number of reasons, including lack of funding. And more doctors are retiring from obstetrics, with fewer doctors replacing them because of malpractice insurance costs in Ohio. What this all means is fewer initial prenatal care appointments are available for lower income women.

*Teresa Long, MD, is health commissioner and Carolyn Slack is director of the maternal child health division for the Columbus Public Health Department, which offers a variety of programs designed to improve maternal and child health, including prenatal care and home visits to pregnant women and new moms.*

**MEDICAL EXPERT:** Stephen Welty, MD

About 50 percent of prematurity should be preventable with better access to health care.

If a mother receives good prenatal care and appropriate follow up, then presumably we can prevent prematurity in those cases. Now, how do we make preventable the 50 percent of preterm births we currently believe can't be prevented?

That's where science comes in. We have identified biomarkers in premature babies that are associated with increased risk of complications of prematurity, and we're "following their tracks" in mothers and their premature babies to determine the biomarkers associated with preterm delivery. We believe this research ultimately will help us prevent neonatal deaths as well as preterm births.

*Stephen E. Welty, MD, is chief of the neonatology section at Nationwide Children's Hospital, Dean W. Jeffers Endowed Chair in Neonatology, and an associate professor of pediatrics at The Ohio State University College of Medicine.*

"Since 2002, our community has lost up to 30 percent of our capacity for initial prenatal care appointments."

**90%** is the  
**national goal**  
for immunization rates



**85.9%** is the  
**Franklin County**  
overall immunization rate



**50-63%**  
Immunization rates for  
certain zip codes  
in Franklin County



# Mom Makes Immunizations a Priority Despite Hardships

Teen mom Christina Leight learned well from her mother. Immunizations are crucial to protect your child from potentially deadly diseases.

The single mother of three-month-old Elijah recently moved to Columbus from Baltimore, Md. She's waiting to start a job she was promised in a new business here. With her limited financial resources, Christina feels fortunate that programs, such as Project L.O.V.E. can provide immunizations at no cost. She says this free service is a testament to how critical it is for parents to have their children immunized.

Christina believes immunizations are even more important today than when she was a child because today newborns are exposed to the outside world sooner. "Small children aren't cooped up in the house like before. Parents are very public today with their children, which increases their risk for illnesses," she says.

While it was heart-wrenching for Christina to watch Elijah get his vaccinations, she feels his short-lived pain is nothing compared to the suffering caused by diseases like the measles.

"Immunizations are even more important today than when I was a child."



# The Facts

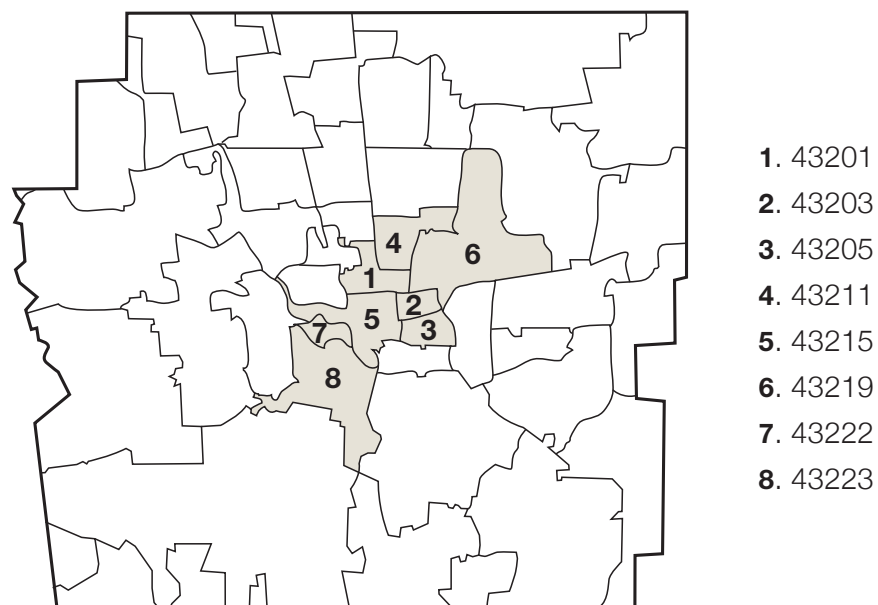
Immunization is a public health success story in the United States.

- In Franklin County, overall childhood immunization rates have doubled to higher than 80 percent since the early 1990s.
- Unfortunately, certain neighborhoods currently range in the low 50s and 60s.

Franklin County has been recognized for the past two years as having one of the highest urban immunization rates in the country by the Centers for Disease Control and Prevention. Across the United States, vaccine-preventable diseases are at or near record low levels. Immunizing children with the recommended vaccines before their third birthday has achieved the greatest success.<sup>1</sup>

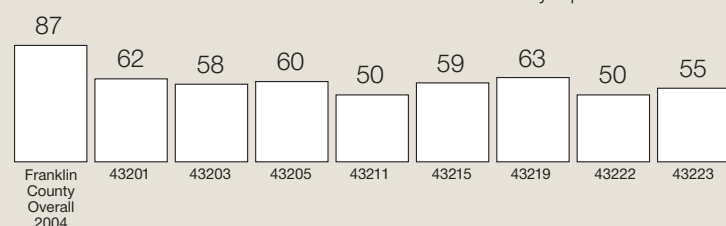
Still, many children in our community are under-immunized, creating the serious risk that we'll witness new outbreaks of preventable diseases. Lack of transportation is the main cause of under-immunization in Franklin County.<sup>2</sup>

- The national goal is to achieve 90 percent immunization among two-year-olds.
- Many of the same obstacles that keep people from getting other kinds of preventive care also keep them from getting their children vaccinated.



## Immunization Rates

IMMUNIZATION RATE 2004—Selected Franklin County Zip Codes



Percent up-to-date and complete by 35 months in 2004.

Note: The Franklin County rate is used to show a general comparison between the County overall and selected neighborhoods. The actual vaccines surveyed in the neighborhoods all are the same, but vary slightly from the Franklin County vaccines.

(Source: Project L.O.V.E. 2007 Retrospective Immunization Survey)

# Expert Insights: How can we achieve 90% immunization in every Franklin County neighborhood?

**COMMUNITY EXPERT:** Sean Hubert

Achieving that 90 percent goal depends on motivating populations that face the greatest number of obstacles to getting preventive health care.

We're focusing our efforts on neighborhoods where the basic necessities of food and housing take precedence over immunization. In the City of Columbus, eight urban zip codes have the lowest immunization rates. Right now we're working with the two communities with the lowest rates. People are very willing to work with us to get kids immunized when we work directly with the community to address problems.

A community-based approach to determine the root causes and find out how to address them is required because each community is unique. For example, one community doesn't have any providers in the area to actually give immunizations to children. Getting transportation outside the area is the problem. The other community has seven different providers, but trust problems keep people from using them. So, what might work to improve immunization rates in one community is not going to work in the other.

*Sean Hubert is director of Project L.O.V.E., a collaboration among area hospitals, local health departments, businesses, physicians and community organizations to assure that Franklin County two-year-olds are fully immunized.*

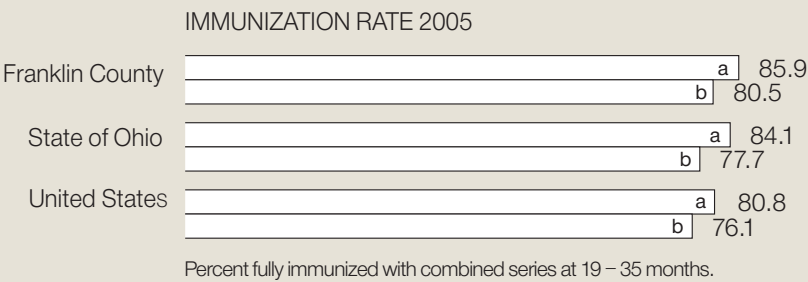
**MEDICAL EXPERT:** William Cotton, MD

Getting immunizations completed by the first birthday is at the top of the list.

One of the biggest barriers is that our patient population tends to relocate a lot. If families don't get their medical records transferred, their immunizations can get off schedule. We're trying a program called Done by One to take advantage of the fact that many families are good about bringing their kids to the doctor until they're about a year old. We try to give all the immunizations needed for the first four years, and required to start school, by the first birthday.

Communication barriers related to the influx of Hispanic and Somali immigrants is a relatively new problem in Franklin County. Even with interpreters, communication is not 100 percent effective, and there are cultural differences as well. Finally, there may be some perceived barriers of cost, but the Vaccines for Children program, which is federally funded but managed by the state, ensures parents who cannot pay can have their children immunized for free.

*William H. Cotton, MD, is medical director of the primary care network at Nationwide Children's Hospital and a clinical professor of pediatrics at The Ohio State University College of Medicine.*



**a.** Series 4:3:1:3:3 (Four or more doses of diphtheria, tetanus and pertussis (DTP), three or more doses of poliovirus vaccine, one or more doses of any measles-containing vaccine (MCV), three or more doses of Haemophilus influenzae type b vaccine (Hib), and three or more doses of hepatitis B (HepB) vaccine.)

**b.** Series 4:3:1:3:3:1\* (Four or more doses of DTP, three or more doses of poliovirus vaccine, one or more doses of any MCV, three or more doses of Hib, three or more doses of HepB, and one or more doses of varicella.)

\* Adding varicella (chicken pox) to the survey in 2005 resulted in a rate drop across the board.

(Source: Centers for Disease Control and Prevention National Immunization Survey)

Asthma is the **#1**  
chronic disorder in  
children nationally

**10%**  
of Franklin County  
children have asthma

Columbus  
ranks **34<sup>th</sup>**  
on the list of 100  
asthma capitals

# Medication and Lifestyle Changes Put Asthmatic Teen in the Game

Kevin Hall has struggled with asthma his entire life. The Groveport Madison student, who recently turned 14, was diagnosed with asthma when he was seven months old.

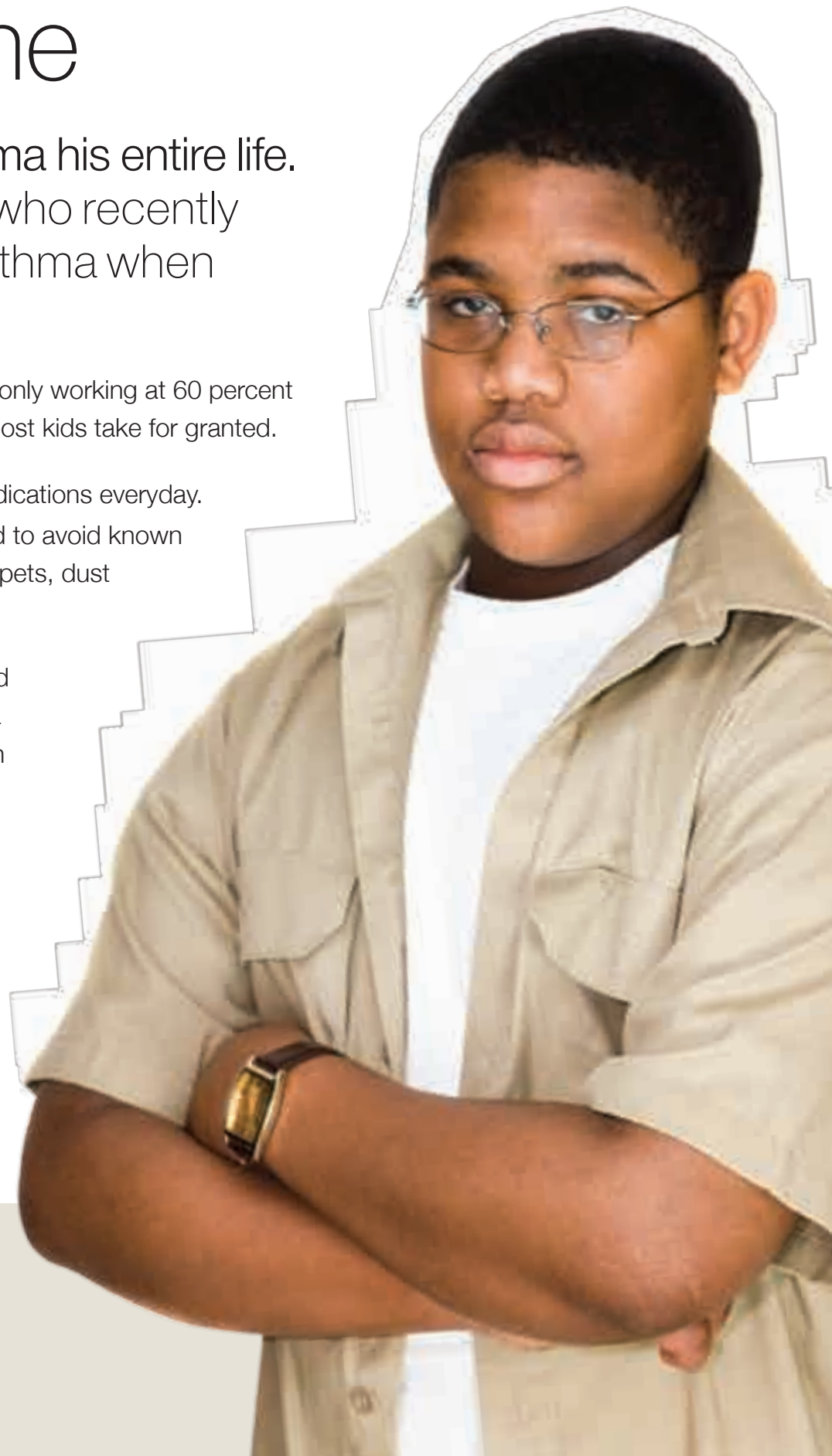
At one point, Kevin's asthma was so severe his lungs were only working at 60 percent capacity. He couldn't even run to catch a ball—something most kids take for granted.

Kevin had to visit his doctor regularly and took a dozen medications everyday. He missed school often. Kevin was also required to avoid known allergens and respiratory irritants, such as tobacco smoke, pets, dust mites, mold and certain foods.

During the last few years, Kevin's quality of life has improved dramatically because of new treatments to control asthma and his own preventive lifestyle measures. Recently he even enjoyed playing junior high basketball.

Kevin's lungs now work at 80 percent capacity, and he hasn't visited the emergency department in two years. This is not the case for other children like Kevin.

“The more I know, the better my chances for not triggering an attack.”



# The Facts

Asthma is the number one chronic disorder in children nationally.

- Columbus ranks 34 on a list of 100 asthma capitals, so-named because they are the most challenging places to live with asthma.
- In 2005, asthma prevalence in Franklin County overall did not differ significantly from the Ohio and U.S. rates.

Nationally, asthma affects more than one child in 20. Poor air quality plus exposure to allergens such as cockroaches and mold tend to push up asthma rates in urban areas.

Poor children suffer most from asthma, their health further compromised by lack of insurance and inadequate medical care.

- In 2006, children in families with an income less than \$20,000 had a significantly higher rate of asthma (13.7) compared to children from families with an income of \$75,000 or more (7.7).<sup>1</sup>

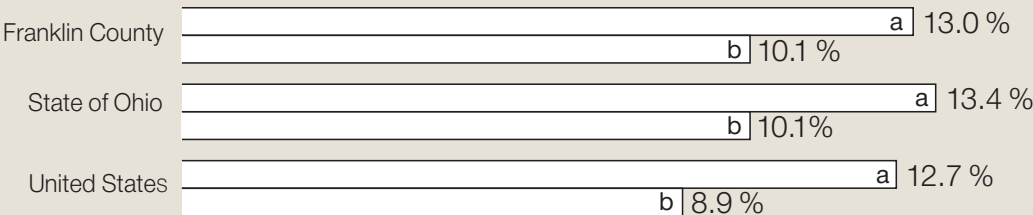
Non-Hispanic black children have higher rates of asthma than non-Hispanic white or Hispanic children.

- In 2006, the rate nationally was 12.9 for non-Hispanic black children, 9.2 for Hispanic children, and 8.7 for non-Hispanic white children.<sup>1</sup>

Asthma itself cannot be prevented. The goal of treatment is to prevent the distressing episodes that become emergencies and require hospitalization.

## 2005 Asthma Prevalence and Regional Rankings

2005 ASTHMA PREVALENCE IN CHILDREN UNDER AGE 18<sup>2</sup>



a. Percent ever told had asthma  
b. Percent with asthma currently

(Sources: Franklin County and Columbus: Community Health Risk Assessment/Behavioral Risk Factor Surveillance System; U.S.: National Vital Health Statistics Series 10)

# Expert Insights: How can we help families control this chronic condition?

**COMMUNITY EXPERT:** Barbara Johnson, RCP, RRT

As the mother of two asthmatic sons, I know education is critical to the well-being of asthmatic children.

Inflammation of the airways is present in all asthma cases. This inflammation is produced by allergies more than 50 percent of the time, but it can also be the result of viral respiratory infections and airborne irritants, which we call “triggers.”

No matter what the trigger, asthma is a serious condition that can be deadly. Everyone who interacts regularly with an asthmatic child should know what to do if he or she has an asthma episode. Education is needed to ensure the family is given accurate information about how to manage asthma at home, school and play.

The National Asthma Educators Certification Board offers a testing program used to assess qualified health professionals’ knowledge in asthma education. Becoming certified is voluntary but it’s a step in the right direction to ensure accurate information is communicated among health care professionals and to patients.

*Barbara Johnson is a registered respiratory therapist and regional programs director for the American Lung Association of Ohio, Central Region. The organization's program Open Airways for Schools, available in more than 130 Franklin County schools, educates children with asthma and empowers them to manage their condition.*

**MEDICAL EXPERT:** Karen McCoy, MD

Proper medication enables the vast majority of asthmatic children to live normally and engage in regular kid activities.

But first we have to diagnose their asthma. Problems here include failure to diagnose it in the busy primary care setting and parents who try to hide asthmatic symptoms because they fear their child won’t be able to participate in sports or may end up on medications that they do not understand and fear.


Once asthma is diagnosed, we try to partner with the family to monitor the child for treatment adherence. It’s also important to have round-the-clock phone access to a medical professional who can help caregivers distinguish between a problem that can be managed at home and one that requires emergency treatment. Treatment monitoring is less successful in low-income families.

*Karen S. McCoy, MD, is chief of the section of pulmonology at Nationwide Children’s Hospital and chief of the division of pediatric pulmonology and associate professor of pediatrics at The Ohio State University College of Medicine.*


2008 ASTHMA CAPITALS RANKING<sup>3</sup> —Regional Cities with Comparable Populations

<b>19</b> /100 Pittsburgh	<b>34</b> /100 Columbus	<b>39</b> /100 Indianapolis	<b>50</b> /100 Cincinnati	<b>52</b> /100 Cleveland	<b>61</b> /100 Louisville
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(Source: Asthma and Allergy Foundation of America)



More than **13%**  
of Franklin County high  
school students  
smoke regularly



**1 in 5**  
deaths are caused  
by tobacco use



**252**  
lives saved if 60%  
of current Columbus City School students  
who smoke quit

# Teen Siblings Cooperate to Kick Smoking Habit

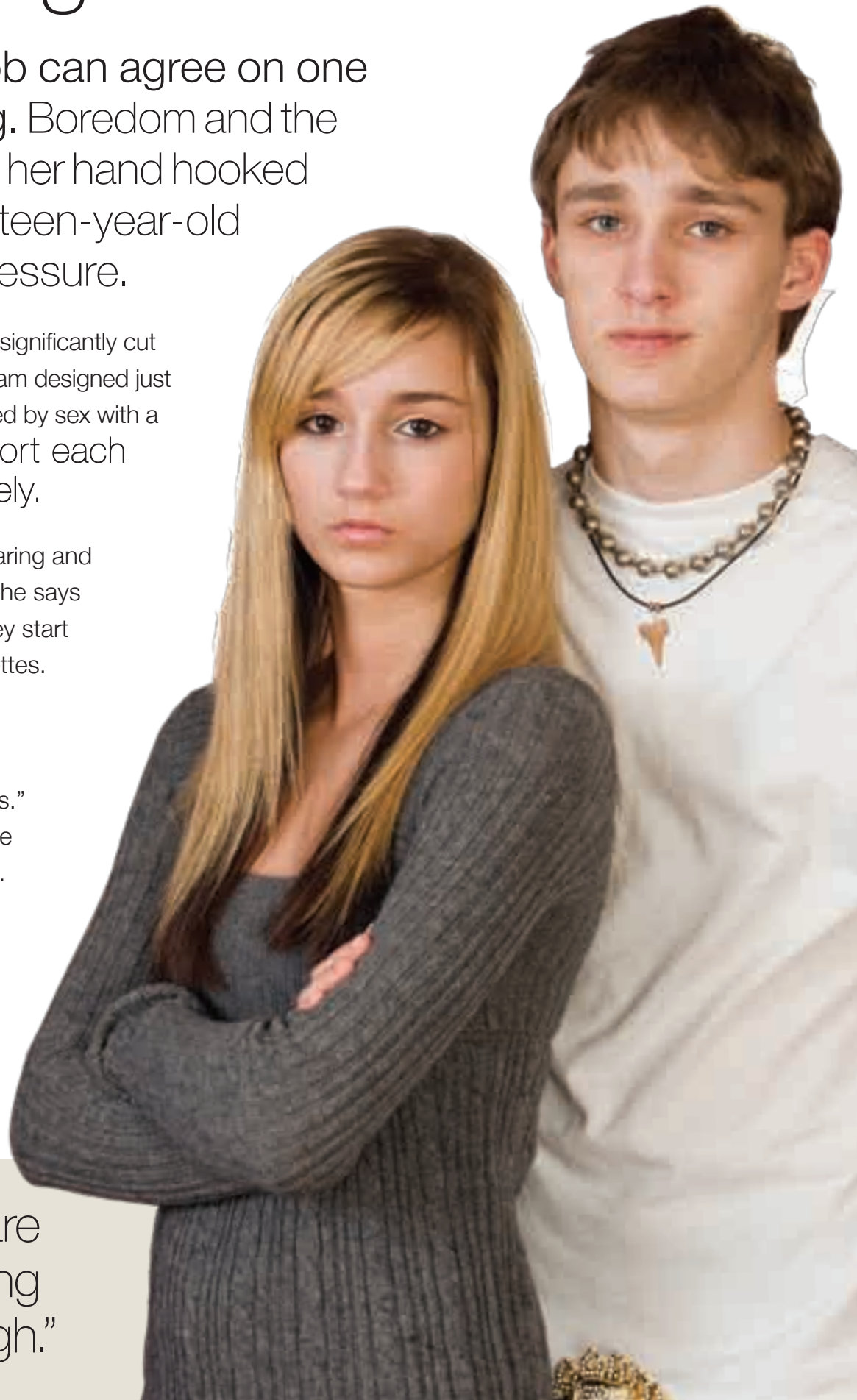
Brin Dillon and her brother Bob can agree on one thing: it's hard to quit smoking. Boredom and the pleasure of having a cigarette in her hand hooked 17-year-old Brin on nicotine. Sixteen-year-old Bob started because of peer pressure.

While the two have not yet quit cold turkey, they have significantly cut back thanks to enrolling in a smoking cessation program designed just for teens. The siblings are in different groups, separated by sex with a same-sex facilitator. But outside class they support each other in hopes to kick the habit entirely.

Brin says one thing that really opened her eyes is hearing and seeing how smoking can impact a person's health. She says kids need to be made aware of the effects before they start junior high, when many are first tempted to try cigarettes.

"What turned me off is when the instructor compared smoking a cigarette to putting your mouth on a car's exhaust pipe," Brin says. "That really opened my eyes." Bob's way to cut back on the number of cigarettes he smokes is staying occupied and not thinking about it. "When I feel the urge, I do other things to keep my mind off it. That's definitely working."

"Kids need to be made aware of the effects of smoking before they start junior high."



# The Facts

## Right here in Ohio:

- One in five deaths is caused by tobacco use
- For each person who dies, at least 20 more suffer from serious smoking related illnesses

Cigarette smoking rates have been slowly declining in the United States since 1965, the year after the Surgeon General declared that smoking can be hazardous to our health. However, we should not underestimate the problem.<sup>1</sup>

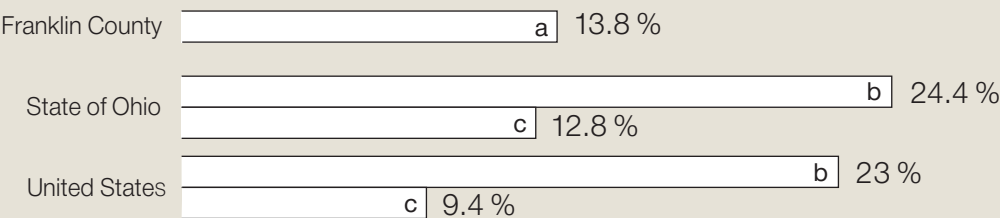
- Tobacco remains the leading cause of preventable deaths in the United States
- Smoking causes more deaths than alcohol, all illicit drugs, homicide, suicide, fires, vehicle crashes and HIV combined
- Smoking is responsible for one third of cancer deaths

Smoking rates have been dropping among teenagers since 1997, and more dramatically than in the adult population. Smoking bans, anti-tobacco campaigns targeting youth, changing cultural attitudes, and the average cost of a pack of cigarettes, \$4.19 in 2006 <sup>2</sup>, have all likely contributed to this decline.

That's good news. But assuming approximately 13.8 percent of 15,260 high school students currently enrolled in Columbus City Schools smoke, that's 2,098 youth in the city's public schools alone. If 60 percent kick the habit, that means 252 lives saved and an additional 5,040 people—our neighbors—spared serious and costly health problems.

In Franklin County in 2006, 13.8 percent of high school students reported smoking monthly or more often, down from 23.8 percent in 1988.<sup>3</sup>

## Cigarette Smoking Grades 9-12



a. Smoked monthly or more often. \*  
b. Smoked cigarettes on one or more of the 30 days preceding the survey.  
c. Smoked cigarettes on 20 or more of the 30 days preceding the survey.  
  
\* Reflects combined rates for students who indicated they smoked about once or twice a month, about once or twice a week, or about every day and is therefore not directly comparable to Ohio and U.S. data.  
  
(Sources: PPAAUS 2006, Franklin County; YRBS 2005, Ohio and US)

# Expert Insights: Why do teens smoke and how can we prevent it?

**COMMUNITY EXPERT:** Wendy Simpkins

Children are three times as sensitive to tobacco advertising as adults.

Recent studies have shown that tobacco-company marketing is the number one reason why children first start to experiment with cigarettes. That's why tobacco counter-marketing is such an important tactic in preventing teen smoking. Currently, tobacco companies spend \$724 million in marketing in Ohio alone, outspending Ohio Tobacco Prevention Foundation programs, including youth-focused tobacco counter-marketing, by close to 20 times.

Parents also play a critical role in preventing teen smoking. Among adult smokers, 80 percent began smoking by age 18. But teens are half as likely to start smoking if their parents talk to them about their strong objections to smoking.

*Wendy Simpkins is senior director of corporate communications for the American Cancer Society's Ohio Division. The American Cancer Society provides smoking cessation programs and online resources for parents.*

**MEDICAL EXPERT:** Brady Reynolds, PhD

Teens require novel treatment approaches to help them quit, no matter why they begin smoking.

To be effective, smoking cessation programs need to take age and lifestyle into consideration to help teens quit. Boys and girls should be separated into different groups, each led by a same-sex facilitator, to create a more relaxed and open atmosphere for the participants. One promising avenue of research—funded by the National Institutes of Health—uses monetary rewards to reinforce not smoking. Preliminary results are positive, showing that teens significantly maintained abstinence from smoking when involved in this program.

*Brady Reynolds, PhD, is a principal investigator in the Center for Biobehavioral Health at The Research Institute at Nationwide Children's Hospital and assistant professor of pediatrics at The Ohio State University. His research focuses on discovering behavioral motivations that may ultimately be used to develop techniques for preventing teen smoking.*

“Recent studies have shown that tobacco-company marketing is the number one reason why children first start to experiment with cigarettes.”

There was a  
**34%**  
decline in teen pregnancies  
between '91 and '05

**1,760**  
Franklin County births  
in 2005 were to women  
ages 15 to 19

**178**  
births per 1,000  
Hispanic teens age 15-19  
in Franklin County

# Teen Mom Juggles School, Work and Parenting

Brianna Cattledge's teenage life changed completely when she became a mom. She worried about how she would support and care for a newborn and finish high school as a single parent.

Seventeen-year-old Brianna can attest that being a teenage parent is hard. When Brianna learned she was pregnant, she didn't realize how much her life would change. "Your priorities definitely change," she said. "Having a baby impacts the rest of your life."

"I think what helps me is that I stay focused. I was determined to graduate." Brianna also is fortunate to have a supportive family. Her grandparents help out financially and watch one-year-old Ni'zeer while Brianna is in school or at the part-time night job she works to help support her son.

Many teen moms don't graduate from high school, but Brianna is an exception. She hopes to get a college degree, even though most teen moms never do.

With her new responsibilities, Brianna doesn't have much time for friends or fun.



# The Facts

A young woman’s life opportunities are diminished when she has a baby during her teens.

- The demands of parenthood will keep her from getting the education needed for a meaningful job that pays well.
- She’ll be less likely to marry and more likely to receive public assistance compared to women who delay childbearing into their 20s or 30s.

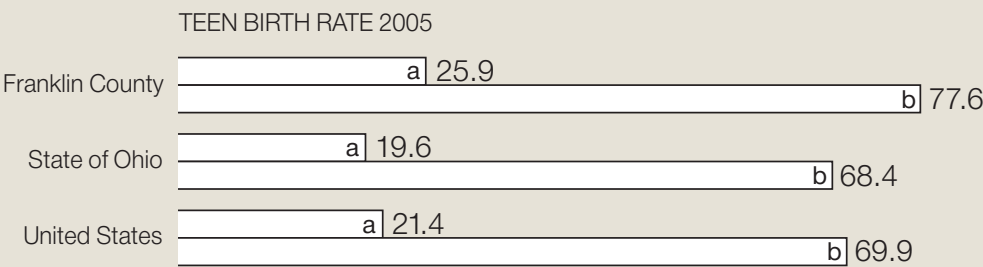
Experts worry that the normal socialization that occurs during the teen years will be interrupted by instant “parentification,” possibly leading to adjustment problems, isolation and depression. And her baby may not fare well either. He’ll be more likely to have a low birth weight, leading to potentially lifelong health problems. Chances are also good the cycle of poverty will repeat itself when he grows up.

Across the United States, teen pregnancies declined by 34 percent between 1991 and 2005.<sup>1</sup>

- According to the Centers for Disease Control and Prevention (CDC), more than 75 percent of the decline can be attributed to increased use of contraception and the remainder to abstinence.
- The CDC has reported, though, that the teen birth rate increased in 2006, but it’s too early to tell if this is the start of a new trend.<sup>1</sup>

In Franklin County, there were 1,760 live births in 2005 to young women ages 15 to 19. Racial disparities are evident in birth rates in this group, with the rate among Hispanic young women more than five times the rate among non-Hispanic whites and more than double the rate among non-Hispanic blacks.

## Teen Birth Rates



a. 15 – 17 years

b. 18 – 19 years

Number of births per 1,000 teens in each age group.

(Sources: Franklin County and Ohio: Ohio Vital Statistics System; U.S.: National Vital Statistics Reports)

# Expert Insights: How do we prevent teen pregnancy?

**COMMUNITY EXPERT:** Lisa Perks

Thirty-one percent of American women under the age of 20 become pregnant, and 80 percent of their pregnancies are unplanned.

Access to contraception is one key to preventing teen pregnancies. Teen pregnancy has declined mostly because teenagers are using contraception. We need to keep that trend going by ensuring access for all teens.

Accurate sexuality education is another key. Sexuality education should help teens learn to identify risks and improve their negotiation or postponement skills. It should also teach skills that will help them make good decisions and talk effectively about sexual situations to peers and trusted adults. For teens who are sexually active, sexuality education should encourage personal responsibility and promote safer sex practices.

*Lisa Perks is the executive director of Planned Parenthood of Central Ohio. Planned Parenthood provides Responsible Sexuality Education, which served 6,784 students in 30 local schools in 2006.*

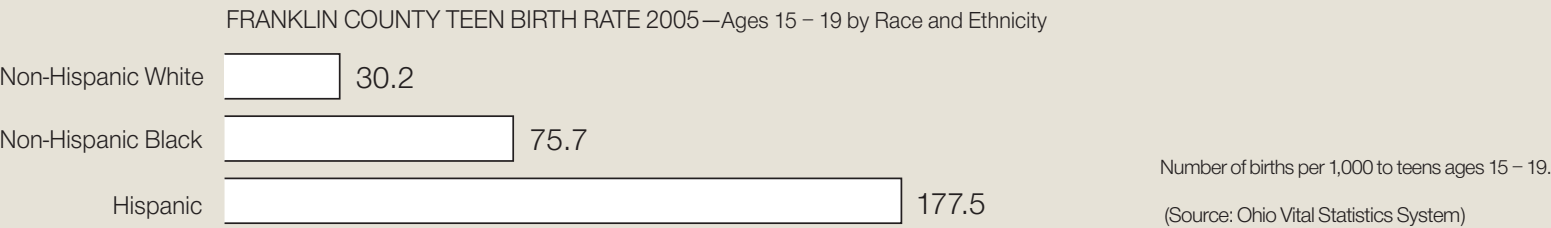
**MEDICAL EXPERT:** Cynthia Holland-Hall, MD, MPH

Reducing the rates of teen pregnancy beyond current levels depends on addressing poverty and issues of self-esteem and self-efficacy.

We assume that teenagers don't want to be pregnant. But what we're really up against is a tremendous ambivalence about pregnancy, especially in high-risk communities. When I see a young girl who's having unprotected sex, it's often the case that she is not actively trying to get pregnant, but she's just not that concerned. She may know other teen moms who are "getting along." She may romanticize the idea of having a baby to love her.


You wish that every teen girl had such a great vision for her future that she'd realize being a teen mom would get in the way of achieving her goals. Unfortunately, we see a lot of young women who don't have positive future goals. I don't know that anyone's doing a great job of addressing that. Some organizations and programs, such as Girls Incorporated and Girl Power, do try to improve self-esteem and provide positive role models.

*Cynthia M. Holland-Hall, MD, MPH, is acting chief of the section of adolescent health at Nationwide Children's Hospital and an associate professor of clinical pediatrics in the section of adolescent medicine at The Ohio State University College of Medicine.*






**70%**  
of unintentional injury deaths  
are due to motor  
vehicle crashes



There was a **28%**  
increase nationally in  
suffocation deaths  
from 1987 to 2004



In **86%**  
2005,  
of Franklin County's  
unintentional injury deaths  
were preventable

# Teen Driver Learns the Value of Safe Driving

When Amy Becker gets into a vehicle, she's reminded how lucky she is to be alive. At the age of 16, she crashed her car trying to make it to cheerleading practice in a hurry.

The accident happened in a matter of seconds, but Amy is still recovering three years later. Her car slid on black ice, flipped and landed in a ditch — on top of Amy. The teen suffered a broken pelvis and second-degree burns over her body.

She says teenage drivers think they are immune from getting into a crash. They realize how vulnerable they really are only after they experience the physical and emotional scars from a severe injury.

Amy recently had reconstructive surgery to her face and arms and can now walk again. The Plain City resident says if she could do it all over, she would have worn her seatbelt and not have rushed to practice. "My philosophy today is that it's better to be late than be dead."



"I didn't realize how much I was putting my own and others' lives in danger."

# The Facts

More children younger than 14 die from unintentional injuries than any other cause.

Nationally, the major causes of injury deaths in 2004 among children younger than 14 were:

- Motor vehicle crash
- Pedestrian injury
- Falls
- Accidental suffocation
- Fire and/or burn injury
- Poisoning
- Drowning
- Bike injury
- Firearms

Deaths from these causes declined overall by 43 percent from 1987 to 2004.<sup>1</sup> Deaths from each cause declined during the same period, except suffocation, which increased 28 percent.<sup>1</sup> In spite of the declines, unintentional injuries remain the leading threat to children.

In Franklin County:

- 29 children ages 0 to 17 died in 2005 as the result of unintentional injuries<sup>2</sup>
- 21 percent of the deaths were to children under the age of 1<sup>2</sup>
- 31 percent were children ages 15 to 17<sup>2</sup>
- 86 percent were ruled preventable by the Franklin County Child Fatality Review Board<sup>2</sup>

Nationally, motor vehicle crashes are the leading cause of unintentional injury deaths. Among youth ages 5 to 19 years, 70 percent of unintentional injury deaths are because of motor vehicle crashes.<sup>3</sup> Among teens, two out of five deaths from all causes are traffic fatalities. Teens are more likely than older drivers to speed and tailgate. Having teenage passengers increases the likelihood that teen drivers will engage in risky driving behaviors.

In Franklin County:

- Motor vehicle crashes caused most (13) of the unintentional injury deaths, including passenger, driver, bicycle and pedestrian injuries<sup>2</sup>
- The majority (46 percent) of these deaths were to children ages 15 to 17, to non-Hispanic white children (77 percent), and to boys (54 percent)<sup>2</sup>

Injury death rates are low in Franklin County compared to Ohio and the U.S. Reasons for this include the higher number of fatalities on rural roads and faster emergency response in urban areas. The number of hospitalizations is the more telling statistic relative to motor vehicle injuries. The number of hospitalizations in central Ohio for motor vehicle crash injuries has increased 7.5 percent each year, every year from 2002 through 2005. Sixty-two percent of those hospitalizations in 2005 were to young men ages 15 – 24.<sup>4</sup>

## Injury Death Rates

INJURY DEATH RATES 2004			NUMBER OF INJURY DEATHS 2005 IN SELECTED OHIO COUNTIES		
Deaths because of unintentional injuries per 100,000 population in 0 to 19 age group.  (Sources: PPAAUS 2006, Franklin County; YRBS 2005, Ohio and US)	Franklin County	10.1	Number of unintentional injury deaths in children 0 to 17 years of age.  (Sources: 2005 Child Fatality Reviews for Cuyahoga County, Hamilton County, Franklin County and Montgomery County)	Cuyahoga	21
	State of Ohio	21.2		Hamilton	17
	United States	21.5		Franklin	29

# Expert Insights: How do we reduce the number of unintentional injuries?

**COMMUNITY EXPERT:** Nancie Bechtel, BSN, MPH, RN

Parents need to be more vigilant.

And that's hard because parents are so busy. But, to prevent injuries parents have to pay attention to their environment. Falls are not the leading cause of injury fatality, but falls can cause death and severe trauma, and they result in the most hospitalizations. So, it's important to keep stairways well lit and free of obstacles, watch that small children can't access open windows—take precautions in the home.

Parents also need to pay attention to what their kids are doing. When our children learned to drive, we taught them they were driving a lethal weapon. You need to get that serious. Make sure your kids wear seatbelts in the car and drive carefully. Make sure they wear helmets when they ride their bikes.

*Nancie Bechtel, BSN, MPH, RN, is executive director of the Central Ohio Trauma System (COTS). COTS is a network of hospitals, city and county officials, and health care professionals whose focus is to promote trauma education and prevention, collect trauma data, coordinate trauma services, and ensure that victims of serious injury receive appropriate care.*

**MEDICAL EXPERT:** Gary Smith, MD, DrPh

Injury is the most compelling public health problem for children and adolescents.

Children live in a world designed by adults, largely for the convenience of adults. Children's safety, unfortunately, is all too often an afterthought. Because children have critical anatomic, physiologic, cognitive and behavioral characteristics that make them unique, what works to prevent injury among adults does not necessarily work for children. The large number of fatalities and disabilities caused by injury among our nation's youth, coupled with the unique developmental needs of children, underscores the importance of prevention efforts tailored to the pediatric population.

We must learn from our successes with other public health problems, such as infectious disease, and apply the same proven prevention approaches to injury. The focus should be on automatic protection strategies, such as environmental modification and product redesign. This "vaccine" approach to injury prevention, combined with evidence-based public policy, is crucial for the prevention of pediatric injuries.

*Gary A. Smith, MD, DrPH, holds the Dimon R. McFerson Endowed Chair in Injury Research and is director of the Nationwide Children's Hospital Center for Injury Research and Policy. He also is director of the biostatistics core facility at the Nationwide Children's Research Institute and an associate professor of Pediatrics in the College of Medicine, The Ohio State University.*

“Children live in a world designed by adults, largely for the convenience of adults, and children's safety is all too often an afterthought.”

Suicide **3<sup>rd</sup>**  
is the leading cause of death  
among adolescents

**47%**  
of youth suicides  
are committed using  
a firearm

**17%**  
of high school students have  
considered suicide  
in the past year

# Teen's Depression Leads to Thoughts of Suicide

From an early age Symone Wallace was under constant pressure to excel inside and outside the classroom. She often took on more than she could handle – sometimes not by choice.

Symone had to care for her younger brother because their mother was severely depressed. At the age of 15, Symone was forced to get a job to support the family. “I had a lot of stress. I knew someday I would hit rock bottom.”

That day came after Symone became depressed herself. She turned away from the outside world, began avoiding friends and family, and slept a lot. At one point she felt that suicide was the solution to avoid all life's problems. Symone considered overdosing on pills, because she recalled hearing often that overdosing is the easiest way to go.

She fortunately had second thoughts. While Symone never told her sister (her best friend) that she was thinking about suicide by overdosing, she did tell her she was very depressed. Her sister urged her to get counseling.

Today, Symone's mental state has improved thanks to intervention. She says kids often don't think before committing suicide. Her best advice is to talk with someone first, get to the root of the problem, and then get the situation fixed.

“ I felt that overdosing was an easy, painless way to deal with my problems.”



# The Facts

Suicide is a serious public health problem that’s shrouded in secrecy and shame.

- Secrecy, because most people feel uncomfortable talking about it.
- Shame, because relatives and friends of suicide victims feel guilty for not recognizing signs or intervening.

Suicide is the third leading cause of death among adolescents, yet it’s a rare topic of conversation.

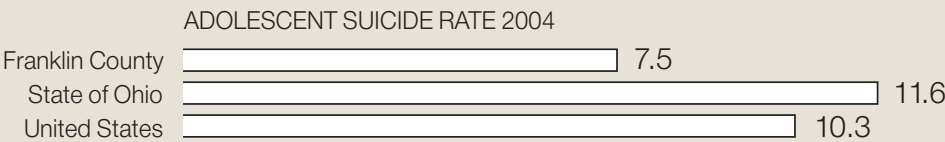
Adolescence is a period of confusion and anxiety. (Adolescence is defined as ages 10 – 24 by the Centers for Disease Control and Prevention.) Seventeen percent of U.S. high school students had seriously considered attempting suicide in the past year.<sup>1</sup> Adolescents also are impulsive. They lack the cognitive development to think through the consequences of their actions.

Nationally, 4,316 young people ages 15 to 24 took their own lives in 2004.

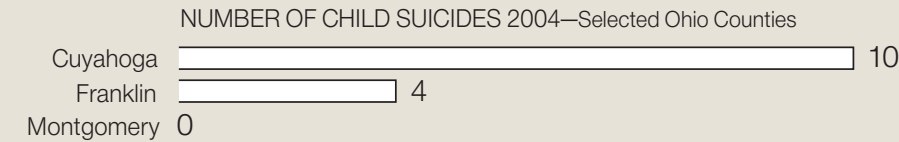
- Four suicides were carried out in Franklin County in that age group in the same year.
- More females attempt suicide, but more males complete it because they use more lethal methods.
- The top three methods used in youth suicides are firearms (47 percent), suffocation (37 percent) and poisoning (8 percent).<sup>2</sup>

Suicide is sometimes viewed as a way to escape the pressures of coming of age.

## Adolescent Suicide Rate 2004



Deaths per 100,000 population in 15 to 24 age group (age specific death rate: number of deaths for a specific age group divided by the estimated population in that age group multiplied by 100,000).  
(Sources: PPAAUS 2006, Franklin County; YRBS 2005, Ohio and US)



Number of suicides in children 0 to 17 years of age.  
(Sources: 2004 Child Fatality Review Boards for Cuyahoga County, Franklin County and Montgomery County)

# Expert Insights: How can adolescent suicide be prevented?

**COMMUNITY EXPERT:** Staci Swenson, MA, MSW, LSIW

We need to talk about youth suicide and create more awareness about prevention.

Denial within families is one of the most significant issues regarding adolescent suicide. Parents do not want to believe their child could take his or her life. It is very important for parents to understand that signs or suspicions should never be overlooked. Parents should be aware that because adolescents are impulsive, suicide could be carried out quickly, without any prior signs. Talking with all youth about suicide issues is essential.

Protective factors such as family cohesion and peer support are significant in building defenses against adolescent suicide. Risk factors such as availability of means, for instance, weapons in the home, or substance abuse can increase suicide risk. Netcare often initiates assistance to youth, and their families, to begin working to reduce risk factors and increase protective factors.

*Staci Swenson, MD, MSW, LSIW, is director of clinical and youth services for Netcare Corporation. Netcare's Youth Crisis Program is a collaboration between Netcare; The Ohio State University Medical Center; The Alcohol, Drug and Mental Health Board of Franklin County; and Nationwide Children's Hospital to expand mental health, alcohol and drug crisis services to youth under age 18 and their families.*

**MEDICAL EXPERT:** John Campo, MD


Our society needs to take on suicide the way business has taken on industrial accidents. Zero tolerance.

Every time there's a suicide in Franklin County, the local mental health community should be asking what we could have done to prevent it. And, we can prevent youth suicides if we build a comprehensive system to identify and care for kids at risk. Primary care is an important part of such a system.

We're working to build a network of pediatric practices and improve the ability of local primary care doctors and their staffs to recognize at-risk kids. The goal is for them to manage less critical cases in primary care and successfully refer severely disturbed kids to a specialty mental health provider. There are many more parts in the system, and we're fortunate in Franklin County to have a unique mental health partnership working through Netcare that's addressing them.

*John V. Campo, MD, is chief of child and adolescent psychiatry and medical director of behavioral health at Nationwide Children's Hospital and professor and chief of the division of child and adolescent psychiatry at The Ohio State University Medical Center.*


“Because youth are impulsive, a child may carry out a suicide quickly without any prior signs. Talking with all youth about suicide is essential.”



**15** young people  
are murdered each day  
in the United States



**81%**  
of the victims are killed  
with a firearm



**32** teens  
were murdered  
in Franklin County in 2004

# Early Intervention is Key to Curbing Gang Involvement

Being in a gang was the best way Derrick Russell knew how to survive. It was the only model he had for what a young man like himself should do.

Derrick grew up in a housing project on Columbus' east side where gang activity and homicides were common. Once he joined a gang, he stayed a member for almost 15 years and at one time was its leader.

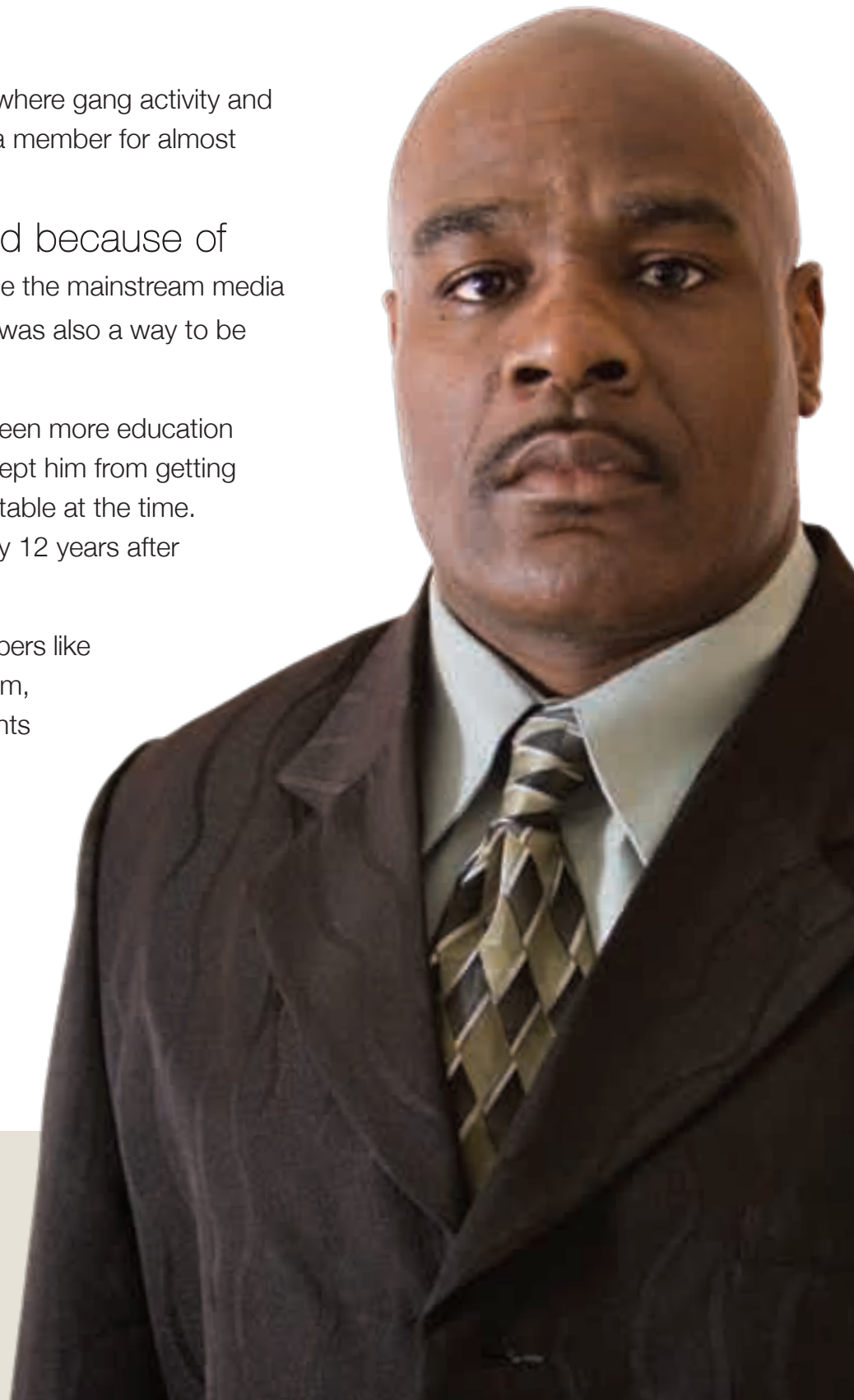
During that time he noticed others in the gang got involved because of peer pressure, to have a sense of belonging, or because the mainstream media gave them the impression it would be a thrill. Being in a gang was also a way to be protected from the violence of rival gangs.

Now 39 years old, Derrick says he wishes there would have been more education and intervention early in his life. He believes that would have kept him from getting wrapped up in a criminal lifestyle that seemed perfectly acceptable at the time. Instead, Derrick's gang involvement put him in prison for nearly 12 years after he pleaded guilty to a drug-trafficking conspiracy charge.

Derrick's experience has convinced him that former gang members like himself, the school system, law enforcement, the justice system, youth organizations, church groups, social services, and parents all need to step up to the plate. Gang life can be made less attractive through effective prevention programs and increased presence among at-risk youth.

Since being released from prison last year, Derrick has become an anti-gang advocate, sharing his story with organizations and youth around central Ohio. He's also hoping to inspire members of his old gang by his example.

"The violence is only going to get worse because gangs are growing and spreading."



# The Facts

During 2004 in the United States:

- An average of 15 young people ages 10 to 24 were murdered each day.
- 81 percent of the victims were killed with a firearm.<sup>1</sup>

Nationally, fewer homicides occur in schools than in homes and neighborhoods. Total school-associated student homicide rates decreased significantly (from .07 to .03 per 100,000) between academic school years 1992 through 2006.<sup>1</sup>

Homicide rates rose in many major U.S. cities in 2006. One reason for the upturn was increased gang violence.<sup>2</sup> While gang activity takes place in suburban and rural areas as well, gang-related homicides occur most frequently in urban neighborhoods.

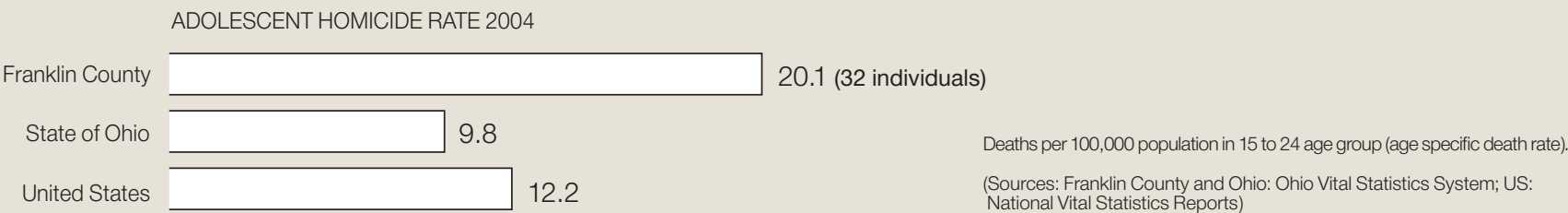
According to the Franklin County Child Fatality Review Board, in 2004:

- 82 percent of firearms and weapons related deaths (ages 0 to 17) were homicides.<sup>3</sup>
- Black children were the victims in 78 percent of cases.<sup>3</sup>
- 78 percent of all adolescent homicide victims were male.<sup>3</sup>

A study of firearm trauma admissions (includes injuries and traumas resulting in deaths) to level 1 pediatric trauma centers between 1992 and 2001 showed that four contiguous zip codes (43203, 43205, 43206, 43207) in Franklin County accounted for 55 percent of pediatric firearm traumas (including deaths) but only 12 percent of the population.<sup>4</sup> These are among the city's poorest neighborhoods.

Nationally, homicide is the leading cause of death of black adolescents (ages 10 to 24).

## Adolescent Homicide Rates



# Expert Insights: How do we prevent youth violence?

**COMMUNITY EXPERT:** Regina Lurry

Gang-related shootings occur over territory, drug deals gone bad, disrespect between gangs, and more. These kids shoot first instead of trying to work things out.

Gangs are more violent because guns are easier to get, and we're now seeing second and third generation gang members. They are younger, and gang life is their primary role model. The kids are different too. They want what they see on TV and aren't afraid to commit a crime to get it. And these days young people are not attached to institutions that once would have kept them involved in mainstream activities.

Gang and violence prevention need to start in elementary school and should be reinforced with constant messages through the high school years. We need to teach kids to deal with anger in a positive way, so they are equipped with the skills they need to handle emotional situations. Then there is the economic problem, lack of jobs, that needs to be addressed. Youth violence is not something that is easily prevented, and, because of that, programs that will fund prevention initiatives are hard to find.

*Regina Lurry is program director for Collective Action for Youth and Neighborhood Development Program (CAYND) for the Africentric Personal Development Shop. CAYND is a three-year pilot program to provide positive alternatives for youth and young adults who reside in a community bound by Mooberry St., Whittier St., Parsons Ave. and Rhoades Ave.*

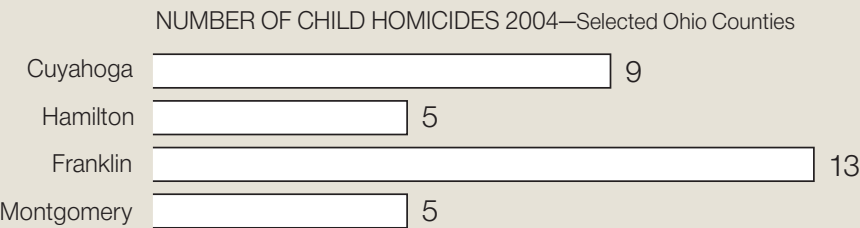
**MEDICAL EXPERT:** Jonathan Groner, MD

The 15 to 24 age group is at high risk for interpersonal violence.

Emergence into adulthood is a time when individuals are establishing their social standing. Add to that the impulsiveness of this age and you can see how the conditions for interpersonal conflict and violence can arise. You don't see the same level of interpersonal violence in older people.

Gangs of some kind or another have been around a long time. But now, the ability to have deadly force immediately available completely changes the equation. This is not an easy problem to solve. Guns are available to kids on the street, and they're available in a lot of homes. There's almost no such thing as safe storage when it comes to children and guns.


*Jonathan I. Groner, MD, is the trauma medical director of the Level 1 trauma program at Nationwide Children's Hospital and associate professor of clinical surgery at The Ohio State University College of Medicine.*




Number of homicides to children 0 to 17 years of age.  
(Sources: 2004 Child Fatality Review Boards for Cuyahoga County, Hamilton County, Franklin County and Montgomery County)



**570,000**  
uninsured children  
are in fair or poor health



**38.9%** of  
uninsured children  
nationally are Hispanic



**7.3%**  
of Franklin County  
children are uninsured

# Daughter with Health Care Needs is Left Uninsured When Mom Goes to Work

Tina Webster fears the worst for her daughter. Like many uninsured central Ohio families struggling to make ends meet, she's worried that her child will be denied health care because she doesn't have insurance.

Tina has a seasonal job that doesn't offer health benefits. That means her daughter is insured only when Tina is collecting unemployment. This leaves her scrambling to make doctor and dentist appointments while her Medicaid coverage is in effect.

Janice, Tina's 7-year-old daughter, has Attention Deficit Hyperactivity Disorder. Janice needs to make regular visits to the doctor and take expensive medication. "It's frightening to think that when I go back to work, Janice won't have insurance."

Tina says she doesn't want the government to foot the bill for her daughter. All she wants is affordable insurance. Tina worries that if her daughter can't get the consistent care she needs while she is young, it could impact her health or mental state as she grows older.

"If there were affordable insurance, that would relieve so much stress in my life."



# The Facts

In Franklin County, 7.3 percent of children were estimated to be uninsured in 2004. These children are more likely than insured children to lack a medical home, go without needed care, and experience worse health outcomes.

Nationally:

- 38.9 percent of uninsured children are Hispanic<sup>1</sup>
- 35.8 percent are non-Hispanic white<sup>1</sup>
- 17.7 percent are non-Hispanic black<sup>1</sup>

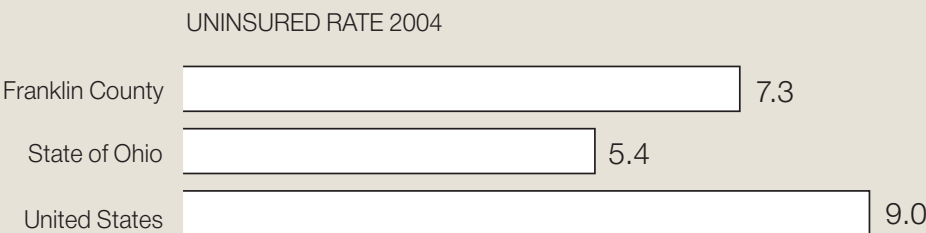
In 2002, approximately 570,000 U.S. children were both uninsured and in either fair or poor health.<sup>2</sup> More than two-thirds of these children were Hispanic, yet fewer than one-fifth of all U.S. children were Hispanic.

Factors that contribute to Hispanic children’s higher risk of being uninsured include having parents who are not U.S. citizens, both parents work, and low family income.<sup>3</sup>

Lack of adequate health insurance, “underinsurance,” is also a problem for children. Recent attention has been brought to the “immunization gap” for children whose parents have private insurance that, because of rising vaccine costs, does not cover all recommended vaccines, particularly newer vaccines. Low to moderate income parents who have employee-sponsored health insurance with high deductibles and copays—another form of underinsurance—may be forced to “ration” care for their children to make ends meet.

Uninsured Hispanic children suffer proportionately more from poor health than uninsured white or black children.

## Uninsured Rate 2004



Estimated percent of children with no health insurance coverage.

(Sources: Franklin County and Ohio: 2004 Ohio Family Health Survey, telephone survey; U.S.: “Summary Health Statistics for U.S. Children: National Health Interview Survey, 2004, in-person survey)

# Expert Insights: How can we increase health care coverage for uninsured children?

**COMMUNITY EXPERT:** Cheryl Boyce, MS

Getting eligible children enrolled in Medicaid is a first step. But the health of the child needs to be considered in the context of the health of the family, where the problems of the uninsured and underinsured are more difficult to solve.

We need to be concerned about the entire family receiving adequate health insurance. Most of the programs provided for low income people now focus on maternal and child health care. Men, the fathers, no longer have any such safety nets.

There is a tendency to believe men enjoy a better health status compared to women and children. While that may be true for white men, it is not true for black men. We consistently see that black men suffer disproportionately from ill health in the population based on studies conducted by our organization. It stresses the family when dad is ill and stays ill because he cannot access the care he needs. This stress manifests as less than optimal health for the entire family.

*Cheryl Boyce is the executive director of the Ohio Commission on Minority Health. The Commission funds innovative, culturally sensitive projects intended to reduce the incidence and severity of diseases or conditions responsible for excess morbidity and mortality in minority populations.*

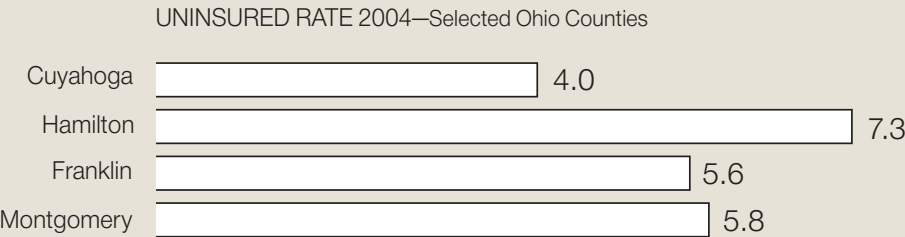
**MEDICAL EXPERT:** Olivia Thomas, MD

When uninsured children come into our neighborhood centers, we do everything we can to get them enrolled in Medicaid or SCHIP.

More than 65,000 children use our hospital's neighborhood centers for primary care services. Approximately 75 to 80 percent of the children, depending on which of the centers you go to, are on Medicaid; about 10 to 15 are uninsured; and the remaining children have private insurance.

During the past six to 10 years we've done a fairly good job in this community of getting eligible children enrolled onto Medicaid or the State Children's Health Insurance Program (SCHIP). What we're finding now is that pockets of children who are not receiving eligible services still exist. However, the eligibility for SCHIP has expanded, so there is a renewed effort among a number of local organizations to enroll more eligible children in Medicaid and SCHIP.


*Olivia W. Thomas, MD, is the section chief of ambulatory pediatrics at Nationwide Children's Hospital and clinical professor of pediatrics and chief of the division of ambulatory pediatrics in the department of pediatrics at The Ohio State University College of Medicine.*




Estimated percent of children with no health insurance coverage.  
(Source: 2004 Ohio Family Survey)



Kids  
spend **3 hrs**  
**every day**  
playing video games or  
**watching TV**



**38%**  
of third graders  
in Franklin County were  
**overweight**



**2 of 3**  
American children  
**cannot pass**  
a basic physical fitness test

# Who is responsible when a child is overweight?

Tensions ran high between 13-year-old Lauren Nelson and her father. Mr. Nelson, a career military officer, thought his daughter should be more “disciplined” when it came to diet and exercise.

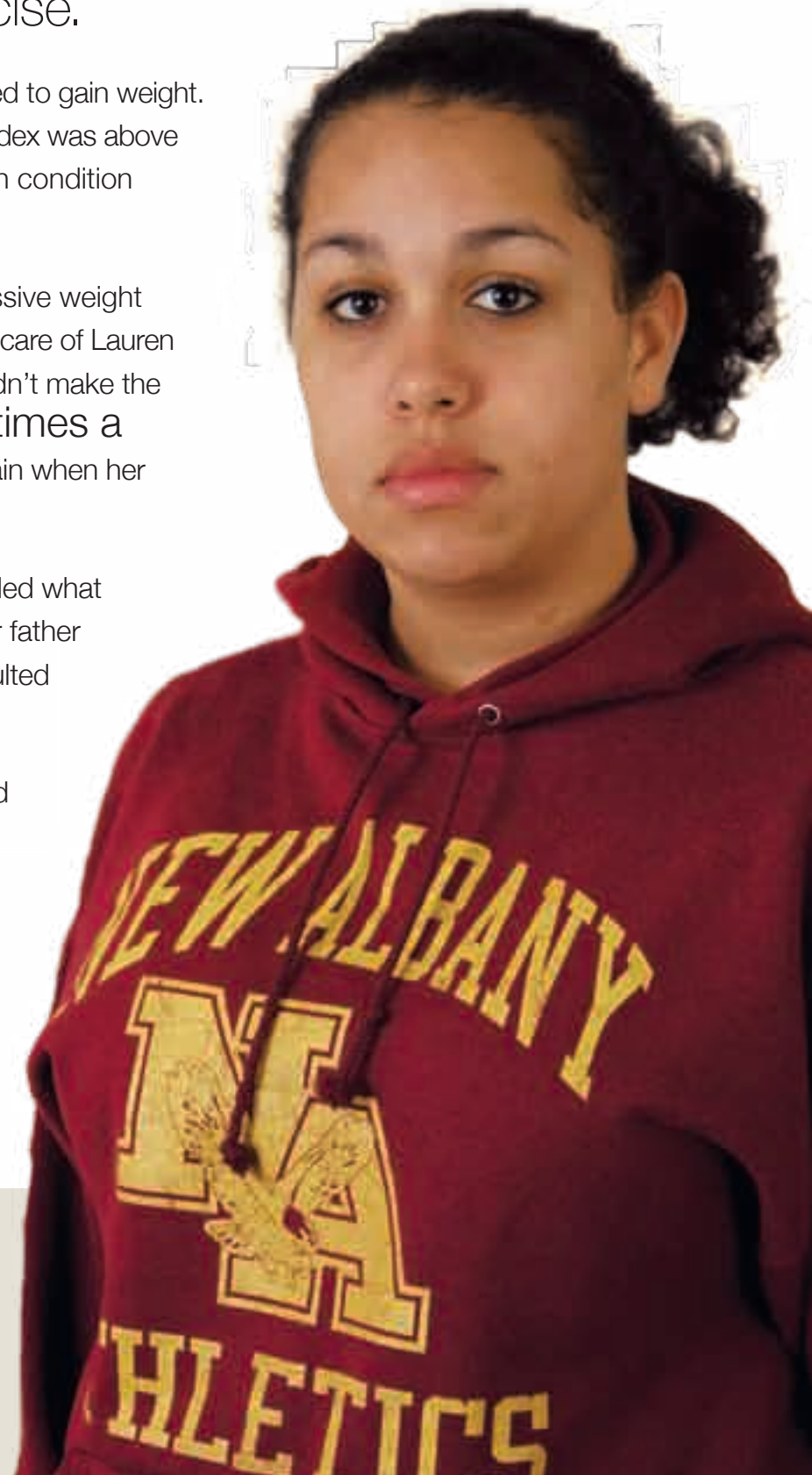
Their strained relationship worsened during the years as Lauren continued to gain weight. By her early teens, Lauren weighed 183 pounds, and her body mass index was above the 95th percentile. She also had Acanthosis Nigricans—a patchy skin condition associated with insulin resistance, an early precursor for diabetes.

Lauren feels her family situation played a significant role in her progressive weight gain. Her father traveled often for the military, leaving her mother to take care of Lauren and her brother. “We developed a lot of unhealthy eating habits and didn’t make the smartest choices,” Lauren admits. **Eating fast food several times a week was common.** Lauren’s mother first noted the weight gain when her daughter was 6 years old.

Her fit and healthy father nagged about her weight. Eventually, he decided what and how much Lauren would eat. While she understands now that her father had been trying to help her, these attempts to control eating habits resulted in many family arguments but no weight loss for Lauren.

Eventually the family resolved that Lauren, with family support, needed to take control of her own weight loss. This gave her the permission she needed to begin adopting her own healthy habits.

Lauren has now entered a supervised weight loss program and has **lost 15 pounds after six months.** This is a good start, but at 168 pounds she still has a long way to go to reach a healthy weight. She acknowledges this will be a life-long battle.



“The best thing is for families to work together as a team to set goals and develop healthy habits.”

# Obesity: Prevalence, causes and costs.

The obesity epidemic threatens our children’s health on a scale unequaled by any other contemporary health issue.

Overweight children are at greater risk of suffering serious health problems as children and of growing up to be overweight or obese adults. The prevalence of overweight children today is daunting. We simply are not prepared as a society, or as a community, to manage the inevitable human consequences or the challenges to our institutions that will result if we don’t reverse the trend. Preventing pediatric obesity is the most important health mandate of our time.

## The Numbers

Government survey data covering the periods 1976–1980 and 2003–2004 show that the prevalence of overweight children is increasing in the United States.

- Prevalence increased from 5.0 percent to 13.9 percent for children ages 2 to 5 years.
- From 6.5 percent to 18.8 percent for children ages 6 to 11 years.
- From 5.0 percent to 17.4 percent for those aged 12 to 19 years.<sup>1</sup>

Ohio currently has the 22nd highest rate of overweight children in the nation<sup>2</sup>, and a Franklin County health survey<sup>3</sup> conducted in 2002 found a disturbing prevalence of overweight children in our community as well:

Group	% of Group Overweight	Group	% of Group Overweight
Franklin County children	25	Franklin County girls	31
Columbus children	30	Franklin County	
Columbus children living in poverty	41	non-Hispanic black children	48

In 2004-2005, the Ohio Department of Health for the first time calculated body mass index (BMI) of public school third graders in every county.<sup>4</sup> BMI is a measure of how much body fat an individual has. The results showed 38 percent of Franklin County third graders were overweight or at risk of becoming overweight. Nearly 50 percent of Columbus’ inner city third graders were overweight or at risk of becoming overweight. (See page 55 to see how BMI is calculated in children.)

### Ohio Third Graders 2004-2005

PERCENTAGE OVERWEIGHT AND AT RISK OF OVERWEIGHT —Selected Counties

<b>32.6</b> Cuyahoga	<b>37.6</b> Franklin	<b>38.0</b> Hamilton	<b>41.5</b> Montgomery
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Note: At the time of this assessment, a BMI between the 85th and 95th percentiles was considered at risk of overweight. A BMI at the 95th percentile or greater was considered overweight. The guidelines have since been revised to eliminate the “at risk of overweight” classification. See page 55.

(Source: Ohio Department of Health)

# The Reasons

A number of variables influence the prevalence of overweight children, including where they live, culture (race, ethnicity) and socio-economic background. The prevalence of overweight children varies by geography, with the highest rates concentrated in southern states.

- Black and Hispanic children are more likely to be overweight than non-Hispanic white children in all age groups.
- Obesity appears to be more prevalent in low income families, but this may be confounded by race.
- When adjusting for race and ethnicity, non-Hispanic white children have higher obesity rates than children in higher income families, but the relationship is not as clear for black and Hispanic children.<sup>5</sup>

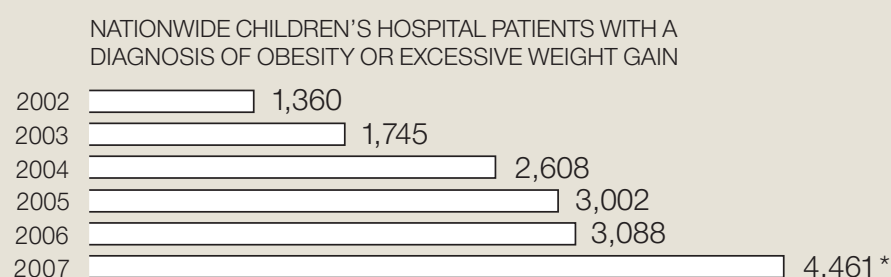
Economic, cultural and geographical factors do not cause obesity in and of themselves. So, what does explain why obesity rates have tripled in school age children during the past 30 years and continue to rise today? No single answer stands out. Rather, certain societal trends have created the right conditions to provoke the epidemic we face today.

The obesity epidemic can be attributed generally to the abundance of taste appealing, high calorie foods combined with the growth of a lifestyle in which physical activity is not essential. Genetics also play a role in obesity.

## Genetics and Family Environment

Because human genes did not change during the last 30 years, genetics alone cannot explain the dramatic upward climb in obesity rates. Genes do not directly cause obesity, except with certain rare disorders. Adults are at greater risk of obesity when there is a family history of obesity and when at least one other household member is obese.<sup>5</sup> When obesity “runs in the family,” genetics may play a role but so may family behavior. The obese adults may be “passing on” the tendency through the patterns of eating and activity they model for young family members.

With few exceptions, children and adults gain weight because they take in more calories than they expend. The modern world makes it easy to eat the wrong foods too often and move too little.



\*Established Center for Healthy Weight and Nutrition

The dramatic rise in number of patients seen at Nationwide Children's Hospital from 2002 to 2007 further underscores the troubling problem of pediatric obesity in our community.

Note: Numbers include unique patients seen in each year at Nationwide Children's Hospital with a diagnosis of obesity or abnormal weight gain.

(Source: Nationwide Children's Hospital)

## Convenience Eating and Overeating

Fewer families have time for home-cooked meals prepared with high quality foods. **Americans eat an average of three fast-food meals a week.** These meals tend to be very high in calories, and diners are given financial incentives to super-size portions or add items they didn't intend to order. When healthier foods are offered on the fast-food menu, most people believe they cost more and taste bland compared to less healthy options.<sup>7</sup>

Packaged foods with high calorie ingredients and low nutritional value also add to the burgeoning availability of foods that marry a relatively inexpensive price to low nutritional value. Not only do these foods replace quality meals at home, they are available in school cafeterias and vending machines. Too often they are the only kinds of food available in stores in some neighborhoods, especially low income neighborhoods.

In addition to eating for convenience, eating too often and too much is common. Snacking or grazing between meals has become the norm. Portion sizes have grown, which encourages eating past satiety.

## Sedentary Habits

Activity benefits children and teens physically and mentally—even improving academic performance. Yet, according to a report by the President's Council on Physical Fitness and Sports<sup>9</sup>,

- Two-thirds of American children cannot pass a basic physical fitness test.
- 40 percent of boys and 70 percent of girls ages 6 to 17 cannot do one pull-up.
- 40 percent show early signs of heart and circulatory problems.

Today's child has fewer opportunities for physical activity throughout the day at school, where physical education requirements and standards have declined. Some schools take the periods previously reserved for recess for additional class time because of the pressure to improve test scores. And, evidence suggests that even organized sports, which have grown during the same time period as obesity rates, lack the ability to impact health. What is needed is the opportunity for varied physical activity throughout the day.<sup>7</sup>

Fast food diners are given financial incentives to super-size portions or add items they didn't intend to order.

When children are not in school, they spend an average of three hours a day watching television or playing computer games. They are increasingly alienated from the outdoors, preferring to play “where there are electrical outlets.” Fear keeps children indoors in some urban neighborhoods where street-level activity may be dangerous. Many neighborhoods lack nearby playgrounds, parks or green spaces.

## How Do We Know if a Child is Overweight?

Screening is more complicated in children than adults. The American Academy of Pediatrics recommends using body mass index (BMI) to screen for overweight children beginning at age 2 and through age 19. Besides highlighting the risk for serious medical conditions, BMI is a good indicator of whether or not a child will grow into an overweight adult.

BMI calculates how much body fat an individual has based on height and weight. In children and teens, BMI must also be age- and sex-specific because body fat changes with age as height increases, and the amount of body fat differs for boys and girls. BMI in children must be translated into a percentile to see how each child’s body fat compares to others of the same age and sex. If a child has a BMI in the 60th percentile, 60 percent of kids of the same sex and age have a lower BMI.

To calculate BMI, the child’s weight is divided by her height squared and the result multiplied by 703 ( $\text{weight} \div \text{height}^2 \times 703$ ).

- Children with BMIs between the 85th and 95th percentiles are considered overweight.
- Children with a BMI above the 95th percentile are considered obese.

Parents are encouraged to know their child’s BMI. It’s best to learn a child’s BMI by having it calculated by his doctor to ensure it is accurate and so the doctor can discuss the result. Because children can grow quickly, especially during puberty, the child’s doctor can best interpret whether a BMI score is concerning. To get an initial calculation to use as a point of discussion with their child’s doctor, parents can use the BMI calculator at [www.NationwideChildrens.org/HealthyWeight](http://www.NationwideChildrens.org/HealthyWeight) (click on the green box for “Online BMI Calculator”).

### WHAT FRANKLIN COUNTY PARENTS KNOW ABOUT BODY MASS INDEX

Doesn't know about BMI	20%	
Has only heard of BMI	31%	
Knows BMI is height & weight	43%	
Says s/he knows child's BMI	6%	

(Source: Weight & Health Survey of Parents, 2007, Franklin County, Ohio. N=500)

# The Costs

We are beginning to realize the tremendous associated costs on the individual level and to our health care system now that the first wave of obese children has reached adulthood. Overweight children run a higher risk of having obesity related conditions (comorbidities) while they are still children.

## Metabolic Disorders

Metabolic disorders include insulin resistance, metabolic syndrome and type 2 diabetes. In adults, metabolic syndrome substantially increases risk of developing type 2 diabetes and early coronary heart disease.

- One study estimates 30 percent of overweight adolescents ages 12 to 19 have metabolic syndrome.<sup>8</sup>
- Another study found that biomarkers of an increased risk of cardiovascular disease are already present in obese children with metabolic syndrome.<sup>9</sup>
- The percentage of children with newly diagnosed diabetes classified as type 2 has increased from less than 5 percent before 1994 to 30 to 50 percent in subsequent years.<sup>10</sup>

## Cardiovascular Disease

Overweight children and teens have been found to have risk factors for cardiovascular disease (CVD) including the metabolic disorders described above, high cholesterol levels, and high blood pressure.

- In one study, almost 60 percent of overweight children ages 5 to 17 had at least one CVD risk factor, and 25 percent had two or more.<sup>11</sup>

## Pulmonary Disease

Asthma and obstructive sleep apnea (breathing stops while sleeping for a duration of 10 seconds or longer) are associated with childhood obesity. Obesity is the most modifiable risk factor for sleep apnea. Obstructive sleep apnea can cause respiratory insufficiency and pulmonary hypertension.

## Gastrointestinal Disease

Non-alcoholic fatty liver disease occurs when excess fatty acids cause a protein reaction that kills liver cells, causing scarring and liver damage. Obese children are at greater risk for this disease, which can cause liver fibrosis, cirrhosis and, more rarely, liver failure. Overweight children also are at greater risk for gastroesophageal reflux compared to children of normal weight.

BMI between the 85th and 95th percentiles in adolescence is associated with a 30 percent increase in adult death rates from all causes in both sexes.<sup>13</sup>

## Psychosocial Problems

In addition to physical health problems, children and teens also suffer psychosocial consequences when overweight. The psychological stress caused by persistently being mocked and shunned by others can cause low self-esteem, which can negatively affect academic performance and social functioning.

- One study found a relationship between depressive symptoms and BMI in preadolescent girls (but not in preadolescent boys) that could be explained by an obsessive concern with being overweight. It concluded that assessing concerns about being overweight might be a useful method to identify those overweight girls at highest risk for associated depression.<sup>12</sup>
- Another study found that adolescent girls who are obese may be particularly at risk for depression or anxiety disorders as adults.<sup>13</sup>

## Health Care Costs

In addition to the harm they cause individuals, the cost of obesity related illnesses on the health care system should not be underestimated.

- More than 27 percent of the growth in overall health care spending between 1987 and 2002 has been attributed to treating obese patients.<sup>14</sup>
- It costs about \$93 billion annually to treat obesity-related illnesses.<sup>14</sup>
- Treating obese patients is 37 percent more expensive than treating patients of normal weight.<sup>14</sup>

Within the pediatric health care system

- Obese children use more resources and are more than twice as likely to be hospitalized as children who are not obese.
- Additional hospital days needed annually by obese pediatric patients by the year 2020 are estimated to range between 1 and 6 million.
- It will cost \$8.6 to \$10.3 billion just for the added beds it will take to accommodate them.<sup>5</sup>

A study commissioned by the Ohio Business Roundtable identified obesity as a priority issue for health care reform in the state. One finding was that by reducing obesity rates to the first quartile state average, Ohio could reduce health care expenditures by \$1.4 to \$1.6 billion. Still, the study determined it would take 10 to 15 years to realize meaningful benefits by reducing obesity across the population. This is because the root causes of obesity are deeply rooted in culture and therefore difficult to address.<sup>15</sup>

By reducing obesity rates, Ohio could reduce health care expenditures by \$1.4 to \$1.6 billion.

**40%**  
of U.S. children show early  
signs of heart and  
circulatory problems

**1 in 3** kids  
born in Ohio are  
**overweight**  
by the age of 8

Only **5%**  
of parents think  
healthy weight is a  
primary concern

# Obesity Roundtable

A panel of leaders representing the major pediatric and adult health care systems in Franklin County, public health in the state, and the business community were asked to participate in a unique roundtable discussion.

**STEVE ALLEN**, MD, CEO, Nationwide Children's Hospital

*Has worked as an administrative leader, practitioner and educator in the medical field for nearly 25 years.*

**DAVID BLOM**, CEO, OhioHealth

*Began his career as a health care system administrator in 1980 and has played an instrumental role in developing the OhioHealth system.*

**ALVIN JACKSON**, MD, Executive Director, Ohio Department of Health

*Advocates a holistic approach to chronic disease prevention in which patients are partners with their physicians in maintaining good health.*

**JOE SAN FILIPPO**, Chief Health Care Strategist, Nationwide Insurance

*Has worked as a health insurance executive for more than 30 years and is also a certified employee benefits specialist.*

**CHIP SOUBA**, MD, Interim CEO, The Ohio State University Medical Center

*Has led the surgical departments of several distinguished hospitals and teaching institutions during his career.*

**CLAUS VON ZYCHLIN**, CEO, Mount Carmel Health Systems

*Started with Mount Carmel nearly two years ago and has served in executive level positions at several hospitals across the Midwest.*

Angela Pace, Director of Community Affairs at WBNS-TV, moderated the discussion. Following are the panel's comments on why obesity is a critical issue, its effects on individuals, the health care system and employers, and how our community should address the problem.

**MODERATOR:** What makes pediatric obesity such an important issue today?

**BLOM:** Obesity related conditions cause permanent damage, things that cannot be recovered later in life. And as the kids get older and remain obese, it drives health care costs, it drives lower productivity, so it's a problem that ought to be dealt with early in life and now.

**ALLEN:** This is an important issue for a number of reasons. First it's just the exponential increase in the number of children who are obese, and it's risen at rates that no one could have predicted back when it seemed to have started in the '70s.

**SAN FILIPPO:** Like any employer we have to compete in a global economy, and as Dave mentioned, when people are obese, they tend to have more health care issues, more absenteeism, more disabilities, and it really becomes a competitive issue. But on a larger scale, it's really a matter of quality of life because we measure society by how we care for the most vulnerable among us. It's a quality of life issue for children, both from health and economic standpoints. As obese adults, they're liable to incur more costs themselves.

Children who are obese when they're 10 have an 80 percent chance of being obese when they're adults.

**SOUBA:** Another reason we should care about this is because we can do something about it. Childhood obesity is a great example of a huge medical and social challenge where a community like Columbus can come together and attack it from not just a scientific standpoint, but from a community standpoint, from an educational standpoint, from a business-at-large perspective, and really pull all of those constituencies together and say we're going to do something about this, we're going to introduce educational programs into our schools at a very young age, and we're going to move the treatment axis way upstream to the prevention side and make a difference in this state and set an example nationwide.

**MODERATOR:** People don't always think about depression as being related to obesity. What are some of the emotional impacts that obesity has?

**JACKSON:** You know, I think our society stigmatizes folks who are obese, and I think this stigma starts early in life. I think that many young people internalize this. There is self-blame, there's shame, and many other types of psychological issues that have long-range impact that go into adulthood. Not to mention the association with chronic disease. I can certainly remember in my practice of medicine the challenges that young people had as they came and talked to me about their struggles with their peers as it relates to their weight, and those struggles are really intense and sometimes actually lead to more eating because food then becomes a comfort. Plus, in our society, beauty is being thin. We've had that as an issue for a long time.

**BLOM:** Another issue people often don't think of in relation to obesity is orthopedics as folks get older. The stress on the joints and muscles and tendons, over time, you just wear things out more quickly if you're heavier than what you ought to be. So as you walk through the orthopedic units on any of our hospitals, there is a disproportionate number of patients who are overweight.

**MODERATOR:** What are the financial implications of obesity?

**VON ZYCHLIN:** Obesity is the number one cause of preventable death or preventable disease. So you can just imagine the number of hospitalizations that involves in this community or nationally for conditions stemming from obesity, whether, as Dave mentioned, you look at orthopedics or you look at hypertension or cardiac disease and you look at a variety of other diseases. That adds up to billions of dollars spent today. So the issue is how do we reduce the cost of health care for preventable conditions, rather than those brought on by genetics or other forms.

**BLOM:** I think this issue is becoming crystallized in the business community's minds more so now than it has been in the past. The Ohio Business Roundtable, through McKinsey Consulting, benchmarked the U.S. health care system with other industrialized countries and then benchmarked Ohio against the best quartile performance from states around the country. And one of the issues that is really driving costs was that obesity and depression drive a tremendous amount of health care costs, from pharmaceutical utilization to use of health care services to lost productivity. Dealing with the obesity issue would have a significant, positive effect on the consumption of health care dollars downstream. Now, that will take a long time. And it requires addressing both the behavioral and environmental factors that contribute to obesity.

**SOUBA:** There's no question that would be a huge pay off. But it's an intervention today that really has a payback 10 to 20 to 30 years down the road. When today's cost of health care is so immense, it's hard to get people to mobilize around a payback way downstream.

**MODERATOR:** Okay. But whose problem is it?

**SAN FILIPPO:** I think it's everybody's problem. From an employer perspective, all these comments are right on, and to put a number on it, I read a study in which about one point of body mass index increase over the adult healthy level of 25 adds about \$120 to health care costs, about \$90 to prescription drug costs. So if you're 10 points over, you're talking about \$2,100 a year for that person's whole life from that point forward. For too many years we've been waiting until people were sick to manage care and costs, but that intervention is too late. What the employers are beginning to realize, is we have to start by preventing these illnesses long before they become a chronic or catastrophic disease.

At 10 points over the adult healthy BMI, you're talking about \$2,100 in extra health care costs per year for your entire life from that point forward.

**BLOM:** Angela, it's all of our problem. And the trick will be to motivate all of us to find a way to intervene, and that's either going to be through legislation, perhaps at the school level – this study that I was talking about, they identified 10 different things some school systems have done around the country to help deal with this problem. Ohio only has two of those in place. So that's one issue. The other is how do you align people's incentives to want to deal with the issue? Align the individual who is obese, what is his or her incentive for doing it? Economically as well as personally. And it's difficult for them to find the interventions to really deal with it because the health care system rewards taking care of them when they're sick, through their orthopedic problem, or their heart disease, but very few economics that allow them to intervene along the way through weight reduction.

**ALLEN:** I think Dave makes an excellent point. So much of the way our health care system is set up is that the money goes to treat the problem, rather than into public health initiatives. And that's true for a wide number of illnesses that affect adults. But the particular problem with childhood obesity is that—we've talked about some children who have become so obese that they require medical therapy—but the vast majority of children who are obese really aren't sick from it. They suffer from some emotional problems, some developmental challenges. The problem is that staying obese throughout their lifetime causes them to have all these other preventable problems. So the problem with childhood obesity is recognizing that we need to intervene now so that we save some of these problems 20 years later at a much lower cost, much lower utilization.

**MODERATOR:** Now, here in Franklin County, how do you communicate to the community that obesity is a problem that starts with and must be prevented in our children?

**VON ZYCHLIN:** I think just what we're doing here today is a good beginning. Talking is a first step to actions, and actions lead to results, so I think it's a good start. All of us need to continue to be involved, keep the issue top of mind and work on opportunities to intervene.

**SAN FILIPPO:** Communication is extremely important, but in addition, we have to take a look at the culture that we are creating in our families, in our work environment, in our communities. I say that because knowledge alone doesn't change behavior, and if it did, nobody would smoke, nobody would drive without their seat belt on. And so it really requires, unfortunately, a set of incentives and disincentives, and literally paying employees to improve their health—creating benefit plans and a culture of health at work so that employees are encouraged, through financial incentives, to lose weight, to quit smoking, to participate in nutrition training programs, and so on. So communication should be aimed at creating a culture of health in the community, in the family, and as far as the children are concerned, really the only way to them is through the parents. So creating the incentives for the parents as well.

**SOUBA:** I think it starts with children. I think it starts in grade school, to create an educational paradigm that says, we are all collectively responsible not just for our individual health but for the health of our community. And there are huge benefits to everyone in having a healthy community. It's about making wise decisions about what is the best way to invest our resources and our time and our energy and our people's knowledge so that we can create a better future for our children and for our country.

**JACKSON:** There are many, many programs – in fact, there are 17 programs at the Ohio Department of Health that deal with childhood obesity. There are many here in Franklin County. But, in a way, we are siloed as a health care delivery system. Our hospitals, our health departments, our community health centers, our doctors' offices, and our state health departments all need to work together in a health care delivery system. That, in my opinion, will save money, and it will demonstrate to our state and our nation that we are a system dedicated to working with the individual to change the outcome of health care.

**BLOM:** I think Dr. Jackson raised an interesting point. If you think about the number of organizations that are focused on obesity right now, it's a big number. You've got government, schools, the business community that recently got engaged, Rotary, the Osteopathic Heritage Foundations, Children's Hunger Alliance, United Way—I can go down the list, and they all have this as a key initiative. What we don't have is a coordinated approach to leveraging all of these organizations collectively to deal with the issue. Now, Columbus has a history of getting together on things like this previously. I can remember when the whole mental health arena was very, very fragmented, and we all got together and formed the ADAMH board, and perhaps something toward that end is something we ought to be thinking about.

It's about making wise decisions with our resources and our time and our energy and our people's knowledge so that we can create a better future for our children and for our country.

# Parents' Knowledge of Childhood Obesity Issues

Only 5 percent of parents think healthy weight is a primary concern to discuss with their child's doctor.

A telephone survey of 500 Franklin County households was conducted during September and October 2007, commissioned by Nationwide Children's Hospital.<sup>16</sup> The objectives of the study were to:

- Examine awareness of basic issues involving childhood weight and the impact of being overweight in childhood on adult health
- Determine awareness of the concept of body mass index (BMI)
- Establish a benchmark set of measurements on public awareness of the BMI against which progress can be measured in future surveys

## Method

A random digit dial sample was drawn from Franklin County, Ohio. Households were screened to include only those households in which there was at least one child 18 years old or younger residing. The interviewer spoke with the primary or equal decision-maker concerning health matters for the children.

The sample was stratified by areas defined by median household income within zip codes to assure that lower income households were included in adequate numbers within the sample. The sample was then weighted to the correct proportions of households within each zip code that have children 18 years old or younger living in the household.

## Highlights

For 13 percent of parents, their child's nutrition is a primary concern, and keeping fit is a concern for 2 percent. The survey also found that only 6 percent of parents know their children's BMI.

The survey determined there is a fairly high degree of understanding the implications of excessive childhood weight for adult health, but also that there is a significant minority of the parental public (ranging from about 14 percent to 34 percent on most issues) that misunderstands the issues, and/or is not sure what to do about excessive weight in their children.

Overall, misperceptions about weight and health and what to do to control the weight of their children are most evident in populations living in areas \$10,000 or more below the countywide median income.

## Misinformation vs. Correct Information

		Incorrect	Correct
Is there a connection between child's weight and health as an adult, or will child outgrow the weight?	Under \$35,000	28%	72%
	>\$35k & <\$75k	11%	89%
	\$75,000 or more	9%	91%
		<input type="checkbox"/> Will outgrow	<input type="checkbox"/> There is a connection

(Source: Weight & Health Survey of Parents, 2007, Franklin County, Ohio. N=500)

# Expert Insights: How can we address obesity in our community?

**COMMUNITY EXPERT:** Janet Jackson

If the obesity trend is not reversed, the current generation of children will have a shorter lifespan than their parents.

No single entity in our community will be able to address this problem alone. United Way is involved in several initiatives designed to bring people together on the issue of obesity. United Way, Columbus Foundation, Columbus Medical Association Foundation and the Osteopathic Heritage Foundations have joined in partnership to form the Community Health Funders' Collaborative. Our first joint funding will be focused on impacting obesity.

Informing this work are six future behaviors that have been shared in a community plan for Franklin County's families and children:

- Children should be active for at least 60 minutes every day.
- Infants and children gain motor skills for lifetime activity.
- Children limit TV and videogame/computer use time to less than two hours a day.
- Parents and guardians provide infants and children with nutritious, age-appropriate foods. Infants are breast-fed when possible.
- Caregivers and schools provide children with nutritious portions of food that meet energy needs.
- Children choose nutrient-rich foods and healthful beverages that meet energy needs.

And then we're also participating in another collaborative that includes partners like Nationwide Children's Hospital, the YMCA of Central Ohio, the Columbus Public Health Department, Columbus City Schools, the Center for Balanced Living, and The Ohio State University School of Public Health. This effort will include an intensive education program with the aim to remake the family's daily habits toward ones that promote health and fitness.

This program is going to be available in neighborhoods throughout central Ohio, at facilities people go to regularly—childcare facilities, preschools, faith centers, recreation centers, health care facilities, and libraries. It's not going to be easy work, but we absolutely have to do it if our kids are going to live longer and healthier lives.


*Janet Jackson is president and CEO of United Way of Central Ohio, which has launched several initiatives to help address obesity in our community, including the online Food and Fitness Program Locator tool.*

		Incorrect	Correct
Children who are heavier than normal for their height at the age of 8 or 9 are more likely as adults to get heart disease.	Under \$35,000	46%	54%
	>\$35k & <\$75k	33%	67%
	\$75,000 or more	27%	73%
		<input type="checkbox"/> False or not sure	<input type="checkbox"/> True


		Incorrect	Correct
Children who are heavier than normal for their height at the age of 8 or 9 are more likely as adults to have depression.	Under \$35,000	52%	48%
	>\$35k & <\$75k	45%	55%
	\$75,000 or more	55%	45%
		<input type="checkbox"/> False or not sure	<input type="checkbox"/> True



**\$93** billion  
is spent to treat  
obesity-related  
illnesses each year



**70%**  
of girls ages 6 to 17  
cannot do  
one pull-up



**60%**  
of overweight kids have  
at least one cardiovascular  
disease risk factor

# What it takes to make a change

Growing up overweight, Danny Gwirtz' family physician often told him "you'll grow out of it." But for Danny, it was just the opposite. He grew bigger.

Danny began gaining weight in the second grade when his parents divorced. The divorce was difficult for him and the lifestyle change affected his eating habits. When he was with his dad, meals were given on a fairly strict schedule. His mother was a little more lenient because she worked more hours, and fast food sometimes was the choice for meals. Neither parent knew what the other was doing in terms of food choices.

The unhealthy school meals Danny ate when he was in grade school compounded the problem. When he entered middle school, food choices at the cafeteria were healthier and portions were smaller, but at that point Danny was already overweight.

Danny often was teased by his older brother, who didn't have a weight problem. His schoolmates would also poke fun at Danny when he couldn't run fast enough because of his weight. The taunting and teasing really hurt his self-esteem, and he realized he would have to lose weight so people wouldn't make fun of him. With his mom's help, Danny enrolled in a weight program for children that taught him about healthy eating and exercise.

Looking back, Danny's mom thinks about their family physician saying Danny would grow out of his weight problem—a common misconception about childhood obesity. She believes the role of the doctor should be to help overweight children to lose weight, instead of brushing off a problem that may stay with the child for the rest of their lives.

She sees improvement in school lunches and thinks having the school be an advocate for healthy eating would play a big role in helping control children's weight. And, turning her introspection on her family, Danny's mom wishes she hadn't offered unhealthy food as comfort to her children. She realizes being allowed to play outside an extra hour is a better treat than Pizza Hut.

"It was embarrassing when I played soccer and couldn't keep up with the other kids."



# Expert Insights: What actions would have the greatest impact on reducing pediatric obesity?

**MEDICAL EXPERT:** Robert Murray, MD

The best approach for preventing obesity is forming positive habits very early in life.

Parents and physicians need to know that the prevalence of overweight children in the past decade has risen fastest in children, ages birth to 5 years.<sup>17</sup> From a mere 5 percent, this group rose to 10 percent in 2000 and 14 percent in 2004. As a result, of the children born in Ohio in the year 2000, 1 in 3 are overweight at age 8 years and in some counties and urban areas, the rate is an even more alarming 50 percent, or 1 in 2 children.<sup>18</sup>

Despite efforts to create a sense of urgency about the health risks tied to obesity, parents rarely recognize it before the child becomes a teen. In one study, only one third of parents acknowledged that their child was overweight, and only one-fourth worried about it.<sup>19</sup>

How do we raise awareness? One way is to use the body mass index (BMI) percentile. Excess weight is reflected in a high BMI. Adults in the family should know their own BMIs and their child's BMI percentile. The earlier in the child's life that we recognize that the percentile is rising, the more likely it is that we can benefit the child.

Physicians need to guide families with specific messages during well child visits to help shape positive behaviors before bad habits are formed. For example, when juice is introduced, when solid foods are started, when table food and snacks are first offered to the growing child, the pediatrician and the parents need to discuss which foods to avoid and which to offer, how much, how often and when. (For detailed information on ways to improve early nutrition and activity for growing babies and toddlers, see "[www.NationwideChildrens.org/HealthyWeight](http://www.NationwideChildrens.org/HealthyWeight) and click on 'Ounce of Prevention.')

The second most important step in obesity prevention is assessing the child's health risk by looking at the family. In families where one or both parents struggle with excess weight or have a history of cardiovascular disease or diabetes, the parents and pediatrician need to be especially vigilant. A key target of early life intervention is communicating to the parents that they have the ability to minimize obesity-related health risks for their children.

Modeling a healthy lifestyle within the family, for instance, is one of the most powerful ways to shape the child's daily routines.<sup>20</sup> In families where obesity-related health problems are an issue, there may be a sense that the child will eventually develop the same diseases, as if it's inevitable. Comments such as, "We're all big boned" or "We all have diabetes. My dad has it, my grandfather had it, and I'm probably going to get it too," are frequent. But by intervening early, we can show parents that they have the tools to break the cycle with their kids.

Modeling a healthy lifestyle within the family is one of the most powerful ways to shape the child's daily routines.

As the child ages, parents have fewer opportunities to influence diet and activity behavior. Eating away from home becomes increasingly common. So, the school becomes an environment that can greatly support the foundation laid down by the family in the child's early years. Daily breakfast has been shown to be a factor in weight management. Yet as kids age, they tend to drop breakfast. **In elementary school, only 5 percent skip breakfast, but in middle-school the rate is 8 to 10 percent, and by high school 13 to 20 percent skip breakfast.** Breakfast consumption falls the most in teen girls, of whom one in three skips.<sup>21</sup>

School breakfasts can be an important safety net, particularly for kids with food insecurity. The National School Lunch Program has been shown to provide far better nutrition than most packed lunches.<sup>22</sup> Unfortunately, the school breakfast and lunch programs have competitors in the form of vended and a la carte foods that rarely measure up. Most adults don't realize that nearly one-third of the child's daily calories come from snack-type foods and drinks.<sup>23</sup> School nutrition policies aimed at providing nutrient-rich food items in all areas of the school can be achieved, particularly when parents and pediatricians work together to ask for it.<sup>24</sup>

Daily activity appears to be critical to maintaining a healthy weight and benefits other aspects of the child's life as well, even classroom performance.<sup>25</sup>

Yet in some Ohio schools, recess and daily physical education have become threatened as pressure for academics rises. Ohio Parks and Recreation Association, a coalition of Ohio organizations, collaborated on an action plan to help everyone from parents to policy makers understand how we can create an active community.<sup>26</sup>

Prevention of obesity and the chronic diseases that arise from it requires awareness, a sense of urgency and close collaboration between all of us who help shape the child at home, in school and in the community.

*Robert Murray, MD, is director of the Center for Healthy Weight and Nutrition at Nationwide Children's Hospital and a professor of pediatrics at The Ohio State University College of Medicine.*

Most adults don't realize that nearly one-third of the child's daily calories come from snack-type foods and drinks .

# Expert Insights: What is the best way to help overweight children?

**MEDICAL EXPERT:** Ihuoma Eneli, MD, MS

Overweight children can begin showing signs of insulin resistance and other obesity-related conditions at very young ages.

That's why it's critical to intervene as soon as possible. Helping children lose weight involves addressing many factors. We don't go for quick weight loss. We want something that's sustainable because children have a lot of life ahead of them.

The first step in helping a child who is overweight is to conduct a comprehensive assessment: medical, nutritional, physical activity and psychological. We conduct a full medical assessment when adults have risk factors for disease, and the same approach should be taken when children have high body mass indexes (BMIs). By the end of this process, we're better able to figure out what the risk factors are for a particular child and family and what would work best for them.

A medical management program may be indicated that offers individualized sessions with health care providers to set goals, help them with monitoring and with incentives. As part of this, attending group sessions with other kids just like them and their parents is also important. That provides social support as well as a teaching environment. They should also work with a dietitian and spend time with a certified athletic trainer on actual physical activity, aerobic activity and activity to build muscle and hopefully replace fat.

Sometimes children will need a more intensive intervention, such as lap band or gastric bypass surgery. Those cases are usually identified through the assessment process and require a regimen similar to children in medical weight management. They can change their mind about surgery at any time yet still be working through a process to help them change their behaviors to healthier ones.

*Ihuoma Eneli, MD, MS, is associate director for clinical programs at Nationwide Children's Hospital Center for Healthy Weight and Nutrition and an associate professor of clinical pediatrics at The Ohio State University College of Medicine.*

Attending group sessions with other kids just like them is important for providing social support as well as a teaching environment.

# Acanthosis Nigricans: A Clue to Future Disease

Acanthosis Nigricans is a skin marker for high levels of insulin in the blood that can help identify early metabolic changes associated with increased weight.

Acanthosis Nigricans is characterized as darkened skin around the neck, under the arms, in the groin and in other skin folds. The skin may also appear thick and raised or rough. Acanthosis Nigricans is associated with high levels of insulin in the blood (hyperinsulinemia) and insulin resistance, which is thought to represent the earliest stage of diabetes progression. This skin marker is most common among obese members of darker-skinned ethnic groups.

Acanthosis Nigricans may also signify the presence of other serious metabolic consequences linked to diabetes and cardiovascular disease, such as elevated blood pressure. This means Acanthosis Nigricans is unique in its ability to represent a physical manifestation of metabolic changes that may indicate a child's future risk for developing diabetes and cardiovascular disease. As such, screening for this skin marker is warranted.

## School-Based Screening Efforts to Identify Acanthosis Nigricans in Columbus' Youth

Columbus City Schools began establishing parameters for routine health screenings to identify overweight children in the 2005 - 2006 school year. While piloting body mass index (BMI) screenings, school nurses also screened for acanthosis nigricans and identified an overwhelming number of children categorized as overweight and obese. As a result, Columbus City Schools have mandated BMI screenings in kindergarten and 3rd and 5th grades district wide.

- Preliminary screening data indicate that 32 percent of 7th grade children, 19 percent of 5th grade children and 15.6 percent of 3rd grade children screen positive for Acanthosis Nigricans.
- Among all children who screen positive, 77 percent are obese.
- Among 5th and 3rd grade students with Acanthosis Nigricans, 46.1 percent have elevated blood pressure.

PRELIMINARY ACANTHOSIS NIGRICANS SCREENING DATA —3rd, 5th, and 7th Grade Children in Zip Code 43207

	% Total ≥ 85th percentile	% Obese	% Overweight	% Total with Acanthosis Nigricans
Grade 3	31.25	15.6	15.6	15.6
Grade 5	34.15	21.95	12	19.5
Grade 7	52.8	28	24.76	16.0

# Recommendations

## For the Family

### Eat a quality diet.

Follow the U.S. Dietary Guidelines. Incorporate five servings of fruits and vegetables per day, try to use whole grains when possible. Include low-fat (skim, 1%, or 2%) dairy products, and concentrate on low-fat protein sources (lean meats, fish, beans and nuts). Limit consumption of juice, soft drinks, fast food, and fried foods. Being aware of correct portion size is also helpful. Portion sizes vary with age; for adolescents and adults, one-half cup generally represents one serving of pasta or rice and 4 ounces (the size of the palm of your hand) represents a serving of meat or protein. Remember that the amount of calories—especially in sugars and fats—that can safely be consumed each day depends on the person's activity level.

### Be better consumers.

Learn to read a food label and look for products with less than 30 percent of calories coming from fats, and seek out food with high percentages of vitamins and minerals. Reading the nutrition information panel will help identify empty calories—those with high calories but no vitamins or minerals. Eliminating empty calories helps ensure that every food and drink contributes to a quality daily diet.

Processed foods tend to be less healthful and should be avoided. You can identify processed foods as those containing multiple ingredients that are difficult to pronounce and possibly unfamiliar to you. Healthful foods tend to contain ingredients that are known to you. Shopping more around the outside edges of the grocery store (fruits, vegetables, meat, freezer, dairy sections) and less in the inside aisles (packaged foods) will promote a more nutritionally balanced diet.

*Two helpful Web sites: [www.nutrition.gov](http://www.nutrition.gov) and [www.snackwise.org](http://www.snackwise.org)*

### Eat together as a family.

Restart the tradition of a family dinner together without the TV.

### Cut sweet drinks.

Substitute sweet drinks and juices with water or other drinks with no calories.

Reading the nutrition information panel will help you identify products with empty calories, so you can eliminate foods with high calories but no vitamins or minerals.

## Know your child's body mass index (BMI).

The American Academy of Pediatrics recommends using BMI to screen for overweight children beginning at age 2 and through age 19. Discuss your child's BMI with your family doctor.

## Stay away from fast food.

Eat fast food rarely. When you do, pick the restaurant and your food carefully. Look up the nutrition information (available at the counter) to know how many calories you're eating. Stick to non-supersized portions. Downsize your selections using the junior menu. Add fruit or a baked potato rather than fries. Add vegetables and fruits at every opportunity. Avoid non-diet sodas and desserts.

# For Schools

## Measure and intervene.

Increase school based BMI screening connected with the medical practices to form a seamless system of early identification and intervention.

## Increase opportunities for physical activity.

Ensure daily recess in all elementary and middle schools. Implement Take 10! This program encourages taking two 10-minute breaks in the school day for moderate to vigorous activity in the classroom.

## Ensure all food and drink choices are healthy.

School nutrition standards should be established for all non-USDA food in schools, including vended, a la carte, school store and fundraisers.

## Advocate and provide learning opportunities.

Schools should incorporate healthy eating and physical activity behaviors into their lessons. After-school programs will provide nutritious food choices and a safe environment for learning and physical activity. Parents, school agencies and schools should advocate, support and implement programs which provide a healthier environment

Downsize your selections and add vegetables and fruits at every opportunity while avoiding non-diet sodas and desserts.

## For Other Organizations

### Healthy lifestyle behaviors start early.

Meals and snacks at childcare centers should comply with the USDA guidelines. Childcare providers need to be trained on best practices in nutrition and physical activity for the young child.

### Faith-based organizations can reach out to families.

Faith-based organizations are a trusted source of support for families. They offer an excellent venue for screening, educational and health promotion programs.

### Health care providers need to screen all children for obesity.

Along with screening children using body mass index, they should counsel families on strategies to prevent childhood obesity. Health care providers should receive training on evidenced-based obesity management guidelines. In addition, they must be involved in basic, translational and clinical research programs that advance our knowledge on causes, prevention and treatment of childhood obesity.

## For Communities

### Neighborhood groups are credible advocates.

Along with working toward safe sidewalks, parks, and neighborhood physical activity programs, neighborhood groups can work in collaboration with stores and local farmers to increase availability of fresh fruits and vegetables.

### Food industry can help improve food choices.

The food industry should offer a variety of healthy food options and provide information on nutrient quality, e.g., require restaurants to list calorie content of food items.

### Employers must get in on the action.

Businesses should support employee activity through corporate steps challenges, Eco-bucks programs, walking and cycling clubs during lunch hour, and other programs that get people moving.

Faith-based organizations offer an excellent venue for screening, educational and health promotion programs.

# For Society

Engage the media to increase awareness about obesity and co-morbid conditions.

Also, assist with health promotion messages on healthy lifestyle behaviors.

Implement a comprehensive community plan.

Community leaders, business leaders, hospitals, government and other stakeholders need a coalition to develop and implement a Columbus community plan to promote optimal nutrition and daily activities.

Support the recommendations of the Ohio Activity Plan.

This recently enacted program of the Ohio Parks and Recreation Department will include communities working on creating a built environment that entices its citizens outside using parks, walkways, bike and roller-blade paths, and skateboard parks. Building downtown grottos that showcase sculpture, fountains and parkland to draw workers and visitors out onto the streets is also advocated.

Advocate for local, state and federal government policies.

Enact policies that create and improve resources for physical activity in schools, workplace and neighborhoods. Advocate for legislation that supports reimbursement for obesity-related office visits; improve access to nutritious food choices for children who are affected by food insecurity; and promote diversification of healthy and culturally appropriate food options in the Women, Infant and Child (WIC) program.

Support legislation to improve the built environment in communities, such as safe sidewalks. There must be uniform access to green spaces, parks and recreation centers in all communities.

*Note: Recommendations were developed by physicians at the Center for Healthy Weight and Nutrition at Nationwide Children's Hospital and incorporate several recommendations from a report "Healthy & Fit: A Community Action Plan for Franklin County Children & Families by the Osteopathic Heritage Foundations and Children's Hunger Alliance."<sup>9</sup>*

Communities can work together to create an environment that entices citizens outside using parks, walkways, bike and roller-blade paths, and skateboard parks.

# Community Resources

The community organizations recognized here provided facts, background and insightful perspective for this report. Nationwide Children's Hospital gives special thanks to the Columbus Public Health Department for analyzing the data provided in most of the graphs throughout the report and for providing feedback on early drafts.

**AFRICENTRIC PERSONAL DEVELOPMENT SHOP, INC.**

1409 E. Livingston Ave.  
Columbus, Ohio 43205  
Phone: 614-253-4448  
Fax: 614-253-5005  
E-mail: [apds@apdsinc.org](mailto:apds@apdsinc.org)  
Web site: [www.apdsinc.org](http://www.apdsinc.org)

**AMERICAN CANCER SOCIETY**

Central Regional Office  
870 Michigan Ave.  
Columbus, Ohio 43215  
Phone: 888-227-6446  
Fax: 877-227-2838  
Web site: [www.cancer.org](http://www.cancer.org)

**AMERICAN LUNG ASSOCIATION OF OHIO,  
CENTRAL REGION**

1950 Arlingate Lane  
Columbus, Ohio 43228  
Phone: 614-279-1700  
Fax: 614-279-4940  
E-mail: [Andrew@ohiolung.org](mailto:Andrew@ohiolung.org)  
Web site: [www.lungusa.org](http://www.lungusa.org)

**CENTRAL OHIO TRAUMA SYSTEM**

431 E. Broad St.  
Columbus, Ohio 43215  
Phone: 614-240-7410  
E-mail: [yourthoughts@goodhealthcolumbus.org](mailto:yourthoughts@goodhealthcolumbus.org)  
Web site: [www.cmaf-ohio.org](http://www.cmaf-ohio.org)

**COLUMBUS MEDICAL ASSOCIATION AND FOUNDATION**

431 E. Broad St., #300  
Columbus, Ohio 43215  
Phone: 614-240-7410  
E-mail: [yourthoughts@goodhealthcolumbus.org](mailto:yourthoughts@goodhealthcolumbus.org)

**COLUMBUS PUBLIC HEALTH DEPARTMENT**

240 Parsons Ave.  
Columbus, Ohio 43215  
Phone: 614-645-7417  
Fax: 614-645-7633  
Web site: [www.publichealth.columbus.gov](http://www.publichealth.columbus.gov)

**EDUCATION COUNCIL**

1929 Kenny Road, Suite 300  
Columbus, Ohio 43210  
Phone: 614-292-0728  
Fax: 614-292-8922  
Web site: [www.edcouncil.org](http://www.edcouncil.org)

**NATIONWIDE CHILDREN'S HOSPITAL**

700 Children's Drive  
Columbus, Ohio 43205  
Phone: 614-722-2000  
Web site: [www.nationwidechildrens.org](http://www.nationwidechildrens.org)

**NETCARE CORPORATION**

199 S. Central Ave.  
Columbus, Ohio 43223  
Phone: 614-276-CARE  
Web site: [www.netcareaccess.org](http://www.netcareaccess.org)

**OHIO COMMISSION ON MINORITY HEALTH**

77 S. High St.  
7th Floor  
Columbus, Ohio 43215  
Phone: 614-466-4000  
Fax: 614-752-9049  
Web site: <http://mih.ohio.gov>

**PLANNED PARENTHOOD OF CENTRAL OHIO, INC.**

206 E. State St.  
Columbus, Ohio 43215  
Phone: 1-800-230-PLAN  
Web site: [www.plannedparenthood.org](http://www.plannedparenthood.org)

**PROJECT L.O.V.E.**

240 Parsons Ave.  
Columbus, Ohio 43215  
Phone: 614-645-LOVE  
Fax: 614-645-0006  
E-mail: seanh@Columbus.gov  
Web site: [www.project-love.org](http://www.project-love.org)

**UNITED WAY OF CENTRAL OHIO**

360 S. Third St.  
Columbus, Ohio 43215  
Phone: 614-227-2700  
Web site: [www.uwcentralohio.org](http://www.uwcentralohio.org)

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CHILDREN'S HUNGER ALLIANCE  
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NATIONWIDE INSURANCE  
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OHIO BUSINESS ROUNDTABLE  
OHIO DEPARTMENT OF HEALTH  
OHIOHEALTH  
THE OHIO STATE UNIVERSITY MEDICAL CENTER  
OSTEOPATHIC HERITAGE FOUNDATIONS



Netcare Corporation



**Planned Parenthood**  
of Central Ohio, Inc.



This is not a complete list of community resources addressing the children's health indicators covered in this report. An online tool to find a variety of Franklin County food and fitness programs by zip code is available from Ohio Action for Healthy Kids at [www.ohioactionforhealthykids.org/programlocator](http://www.ohioactionforhealthykids.org/programlocator). This tool is provided by Children's Hunger Alliance, United Way of Central Ohio and Osteopathic Heritage Foundations.



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*Note: All referenced Web sites/pages were available on March 31, 2008.*



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